

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

DENTAL IMAGING TECHNOLOGIES CORPORATION,  
Petitioner,

v.

3SHAPE A/S,  
Patent Owner.

---

IPR2024-00849  
Patent 10,695,151 B2

---

Before HUBERT C. LORIN, MICHELLE N. WORMMEESTER, and  
JAMES J. MAYBERRY, *Administrative Patent Judges*.

MAYBERRY, *Administrative Patent Judge*.

DECISION

Denying Institution of *Inter Partes* Review

35 U.S.C. § 314

Denying Motion for Joinder

35 U.S.C. § 315(c); 37 C.F.R. § 42.122

## I. INTRODUCTION

### A. Background and Summary

Dental Imaging Technologies Corporation (“Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting *inter partes* review of claims 1, 2, 4, 5, 9, 10, and 12–17 of U.S. Patent No. 10,695,151 B2 (Ex. 1001, “the ’151 patent”). The Petition is a “copycat Petition”<sup>1</sup> to the petition in IPR2023-01315 (the “Medit IPR”). Pet. 1; *see also* IPR2023-01315, Paper 6 (providing the Institution Decision in *Medit Corp. v. 3Shape A/S*, which challenges the same claims in the ’151 patent). With the Petition in this proceeding, Petitioner also files a Motion for Joinder (“Motion” or “Mot.”) seeking to join the Medit IPR. Paper 3.

3Shape A/S (“Patent Owner”) filed a Preliminary Response (Paper 11, “Prelim. Resp.”) and an Opposition to the Motion (Paper 7, “Opp.”). Petitioner filed a Reply to the Opposition. Paper 10 (“Reply”).

We have authority to determine whether to institute an *inter partes* review. 35 U.S.C. § 314 (2018); 37 C.F.R. § 42.4(a) (2024) (permitting the Board to institute trial on behalf of the Director). To institute an *inter partes* review, we must determine that the information presented in the Petition shows “a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). Instituting an *inter partes* review, however, is discretionary. *See Harmonic*

---

<sup>1</sup> As defined and used later in this Decision, we use the term “me-too” petition to be the same as a “copycat” petition. A “me-too” or “copycat” petition is a petition that is nearly identical to a previously-filed petition—a petition for which the Board instituted trial. These types of petitions are common for a party seeking to join the instituted trial under our joinder rules. *See* 37 C.F.R. § 42.122(b).

*Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“[T]he PTO is permitted, but never compelled, to institute an IPR proceeding.”).

Joinder is also discretionary. *See* 35 U.S.C. § 315(c) (“If the Director institutes an inter partes review, the Director, in his or her discretion, may join . . . a party to that inter partes review . . .”).

For the reasons set forth below, we exercise our discretion to not institute trial. Consequently, we deny Petitioner’s Motion to join IPR2023-01315.

*B. Real Parties in Interest*

Petitioner identifies itself and Carestream Dental LLC as real parties in interest. Pet. 64. Patent Owner identifies itself as the real party in interest. Paper 4, 1.

*C. Related Proceedings*

Petitioner indicates, and Patent Owner agrees, that the ’151 patent is asserted in *3Shape A/S v. Carestream Dental, LLC*, Case No. 1:22-cv-01829 (N.D. Ga.), and *3Shape A/S v. Medit Corp.*, Case No. W-22-CV-00443-ADA-DTG (W.D. Tex.). Pet. 65; Paper 4, 1.

The parties identify the ’151 patent as challenged in *Medit Corporation v. 3Shape A/S*, IPR2023-01315. Pet. 65; Paper 4, 1. Patent Owner also identifies the ’151 patent as challenged in *Dental Imaging Technologies Corporation d/b/a/ DEXIS v. 3Shape A/S*, IPR2023-00400. Paper 4, 1. Patent Owner indicates the petition in IPR2023-00400 was denied. *Id.*; *see also* IPR2023-00400, Paper 7 (providing decision denying institution), Paper 8 (providing petitioner’s request for Director Review), Paper 9 (denying Director Review).

*D. The '151 patent (Ex. 1001)*

The '151 patent, titled “Detecting Tooth Shade,” issued June 30, 2022, from an application filed February 5, 2018, and ultimately claims priority to a foreign application filed February 7, 2014. Ex. 1001, codes (22), (30), (45), (54). The '151 patent “relates to methods and . . . user interfaces for determining the shade of a patient’s tooth or teeth and for utilizing the determined tooth shades for designing and manufacturing dental restorations.” *Id.* at 1:19–22. The '151 patent explains that “[w]hen designing and manufacturing a dental restoration for a patient, such as a crown or a bridge restoration, it is advantageous that both the shape and shade of the manufactured restoration is adapted to the patient’s natural teeth surrounding the restoration.” *Id.* at 1:23–27.

The '151 patent explains that “[i]n many cases, the dental restoration is manufactured with a shade profile where the shade differs from the incisal edge towards cervical end of the restoration.” Ex. 1001, 2:57–59. The '151 patent describes embodiments that allow “the operator to determine tooth shade values for several points on the tooth such that a shade profile can be determined for the dental restoration.” *Id.* at 2:59–62. The '151 patent describes a method for determining shade of a patient’s tooth that includes obtaining a digital 3D representation of the tooth. *Id.* at 2:6–8. “[T]he digital 3D representation comprises shape data and texture data for the tooth.” *Id.* at 2:9–10.

Figure 7A, reproduced below, depicts a schematic of intra-oral scanning according to an embodiment of the '151 patent. Ex. 1001, 15:50–51.

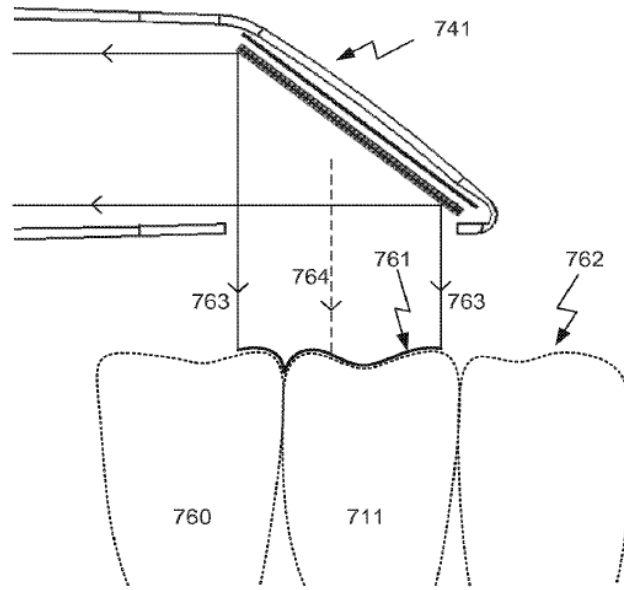


Figure 7A depicts a cross-sectional view of scanner 741 and teeth 711, 760. *Id.* at 16:10–13. Scanner 741 “is held in one position relative to” teeth 711, 760 “while recording a sequence of 2D images for one sub-scan.” Ex. 1001, 16:10–14. Full line 761 represents the field of view of the scanner and “is determined by the light source, the optical components and the image sensor of the scanner.” *Id.* at 16:15–18. “Field of View 761 covers part of the surface of the tooth 711 and part of the surface of the neighbor tooth 760.” *Id.* at 16:19–21. “The generated digital 3D representation can thus also contain data for the neighbor teeth.” *Id.* at 16:21–22. Scanner 741 “is arranged such that the acquired sub-scan comprises shape and color information for the incisal edge 762 of the teeth.” *Id.* at 16:26–28. Probe light rays 763 from the scanner correspond to the perimeter of the field of view and “define the optical path 764 of the scanner probe light at the tooth 711.” *Id.* at 16:28–32. The ’151 patent further describes that a “digital 3D representation of the tooth can be generated by combining sub-scans

acquired from different orientations relative to the teeth, e.g. by sub-scan registration.” *Id.* at 16:33–35.

The ’151 patent further discloses that the texture data of the tooth “can be a texture profile expressing the variation in the texture over the tooth,” but in “some embodiments, the texture information comprises at least one of tooth color or surface roughness.” Ex. 1001, 2:32–38.

When the texture information comprises tooth color information, the texture data expressing a texture profile of the tooth may be color data expressing a color profile of the tooth, and the tooth shade value for a point on the tooth may be derived by comparing the color data of the corresponding point of the digital 3D representation with known color values of one or more reference tooth shade values.

*Id.* at 2:39–45.

#### *E. Challenged Claims*

Petitioner challenges claims 1, 2, 4, 5, 9, 10, and 12–17. Pet. 1. Claims 1, 13, and 14 are independent claims. We reproduce these independent claims below, adding bracketing to assist in referring to the claim limitations.<sup>2</sup>

1. [1Pre] A method for determining shade of a patient’s tooth, wherein the method comprises:

[1a] obtaining a digital 3D representation of the tooth, where the digital 3D representation comprises shape data and texture data for the tooth; and

[1b] determining a tooth shade value for at least one point on the tooth based on the texture data of the corresponding point of the digital 3D representation and on known texture values of one or more reference tooth shade values,

---

<sup>2</sup> We use Petitioner’s designations for the bracketed limitation labels. Pet. viii–x.

[1c] wherein the method comprises deriving a certainty score expressing the certainty of the determined tooth shade value.

Ex. 1001, 21:28–40.

13. [13Pre] A method for determining shade of a patient's tooth, wherein the method comprises:

[13a] obtaining a digital 3D representation of the tooth, where the digital 3D representation comprises shape data and texture data for the tooth; and

[13b] determining a tooth shade value for at least one point on the tooth based on the texture data of the corresponding point of the digital 3D representation and on known texture values of one or more reference tooth shade values,

[13c] wherein the method comprises creating a shade profile for the tooth from shade values determined one or more points on the tooth,

[13d] wherein the tooth shade profile comprises a one or more tooth shade regions on the tooth surface where an average tooth shade is derived for each region from tooth shade values determined for a number of points within the region.

Ex. 1001, 22:19–36.

14. [14Pre] A method for determining shade of a patient's tooth, wherein the method comprises:

[14a] obtaining a digital 3D representation of the tooth, where the digital 3D representation comprises shape data and texture data for the tooth; and

[14b] determining a tooth shade value for at least one point on the tooth based on the texture data of the corresponding point of the digital 3D representation and on known texture values of one or more reference tooth shade values,

[14c] wherein obtaining the digital 3D representation of the tooth comprises recording a series of sub-scans of the tooth, where at least one of said sub-scans comprises both texture information and geometry information for said tooth, and generating the digital 3D representation of the tooth from the recorded series of sub-scans.

Ex. 1001, 22:37–52.

*F. Asserted Grounds*

Petitioner contends that claims 1, 2, 4, 5, 9, 10, and 12–17 of the ’151 patent are unpatentable under the following grounds:

| Claims Challenged    | 35 U.S.C. §      | Reference(s)/Basis                        |
|----------------------|------------------|-------------------------------------------|
| 1, 12, 14, 15        | 102 <sup>3</sup> | Korten <sup>4</sup>                       |
| 1, 2, 4, 5, 9, 12–16 | 103              | Korten, Lehmann II <sup>5</sup>           |
| 10, 16, 17           | 103              | Korten, Lehmann II, Babayoff <sup>6</sup> |
| 1, 2, 9, 12, 14–16   | 103              | Korten, Lehmann I <sup>7</sup>            |

---

<sup>3</sup> The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 296–07 (2011), took effect on September 16, 2011. The changes to 35 U.S.C. §§ 102 and 103 in the AIA do not apply to any patent application filed before March 16, 2013. Because the earliest possible priority date for the ’554 patent is after March 16, 2013, we refer to the AIA version of the statute.

<sup>4</sup> U.S. Patent 10,028,810 B2, issued July 24, 2018, from a European application filed April 29, 2013 (Ex. 1009, “Korten”)

<sup>5</sup> U.S. Patent Appl. Pub. 2011/0188086 A1, published Aug. 4, 2011 (Ex. 1011, “Lehmann II”).

<sup>6</sup> U.S. Patent 7,698,068 B2, issued Apr. 13, 2010 (Ex. 1013, “Babayoff”).

<sup>7</sup> U.S. Patent 6,206,691 B1, issued Mar. 27, 2001 (Ex. 1010, “Lehmann I”).

| Claims Challenged | 35 U.S.C. § | Reference(s)/Basis       |
|-------------------|-------------|--------------------------|
| 13                | 103         | Korten, Pye <sup>8</sup> |
| 10, 16, 17        | 103         | Korten, Babayoff         |

Pet. 3. Petitioner relies on the Declaration of Hassan Foroosh, Ph.D.  
(Ex. 1015, “Foroosh Decl.”).

The following subsections provide brief descriptions of the asserted prior art references.

*1. Korten (Ex. 1009)*

Korten is titled “Method of Capturing Data from a Patient’s Dentition and System for Performing Such Method.” Ex. 1009, code (54). Korten “relates to a method and a system which allows for capturing the shape and for measuring the color in independent steps and for providing a correlation between the captured shape and the location at which the color is measured.” *Id.* at 1:7–13.

The specific method of Korten involves the following steps:  
positioning a first optical sensor relative to patient’s dentition; capturing via the first optical sensor at least a portion of the shape of a tooth in the patient’s dentition and based thereon providing a first virtual dentition model representing that shape in a three-dimensional coordinate system;  
independent from capturing the shape, measuring a first color at a first location on the tooth portion; and providing a correlation between the first location of the first color and a coordinate in the first virtual dentition model.

---

<sup>8</sup> U.S. Patent 7,341,450 B2, issued Mar. 11, 2008 (Ex. 1012, “Pye”).

*Id.* at 2:1–12. The “invention preferably allows measuring color and accounting for translucency and reflectivity of the tooth at which the color is measured,” using a spectrometer. *Id.* at 2:23–42.

Korten’s system first captures “at least a portion of the shape of a tooth,” and “[b]ased on the captured shape a first virtual dentition model is provided which preferably represents that shape in a three-dimensional coordinate system.” *Id.* at 8:25–27. “The measurement of color, for example the first color, is performed independent from capturing the shape. This means that preferably the data from capturing the shape are not used to derive color therefrom, but that separate data about the color are measured in addition to the shape data.” *Id.* at 8:29–34. Then, the “shape data and color data are preferably subsequently correlated such that particular measured colors are brought in association with particular coordinates or locations in the corresponding first virtual dentition model of the tooth portions of which the color were measured.” *Id.* at 8:34–39.

## 2. *Lehmann I (Ex. 1010)*

Lehmann I is titled “System and Methods for Analyzing Tooth Shades.” Ex. 1010, code (54). The patent is “directed to computer-based system and methods for analyzing color images of one or m[o]re teeth and comparing them to known tooth shades for use in certain clinical or cosmetic procedures.” *Id.* at 1:16–21.

Lehmann I describes that a “necessary step in the modification of a patient’s tooth color is to determine the ‘shade’ of an existing tooth.” Ex. 1010, 1:33–34. The patent describes that prior “attempts to measure tooth shade . . . fail for various reasons, including primarily color contamination due to reflection and/or tooth translucency.” *Id.* at 2:49–52.

Also, “prior art using calorimeters [(sic, ‘colorimeters’)] often samples a single tooth location in attempt to analyze its color,” which “fails to adequately characterize the entire spatial extent of the tooth, much less address the issue of matching the shade of one tooth to the shades of adjacent teeth.” *Id.* at 2:55–60.

In Lehmann I, a “camera captures digital color images of the tooth, which are processed to form pseudo-pixels corresponding to areas of the tooth surface, and then compared to images of tooth shades relating to reference shade guides.” Ex. 1010, 3:27–31. “[T]he camera is equipped with a sleeve and illumination Subsystems that help reduce the variations in the color of digital images due to external factors.” *Id.* at 3:33–36. After taking images of known reference teeth colors, and images of subject teeth, each image is processed into “pseudo-pixels,” where “each pseudo-pixel 44 is made up of all or some of the real pixels within the area of the associated pseudo-pixel.” *Id.* at 5:60–62. Then, “the intensity and color associated with a pseudo-pixel are computed or otherwise formed as an average (or other statistical measure) of the actual pixels forming the pseudo-pixel.” *Id.* at 6:15–18. In a subsequent step:

each pseudo pixel of the REAL IMAGE is compared to each pseudo-pixel of the REFERENCE IMAGE; and a composite match number (“CMN”) is created indicating how well the REAL IMAGE matches to that REFERENCE IMAGE. The composite match numbers are compared to one another and one of the REFERENCE IMAGES is selected as the “best fit” match to the REAL IMAGE.

*Id.* at 9:35–42.

3. *Lehmann II (Ex. 1011)*

Lehmann II, titled “Tooth Shade Analyzer System and Methods,” addresses procedures involving the modification of tooth shape, alignment, and color. Ex. 1011, code (55), ¶ 2.

Lehmann II describes that a “necessary step in altering a patient’s tooth color is to determine the ‘shade’ of the existing tooth.” Ex. 1011 ¶ 4. Once the tooth shade is determined, the information is used for the particular procedure needed. *Id.* ¶ 7. Lehmann’s system entails

electronically imaging a patient’s tooth to obtain an image which includes color information representative of tooth color; determining the patient’s tooth color from the color information of the image; and displaying the determined tooth color to identify one or more tooth shades having a combined color corresponding to the determined tooth color.

*Id.* ¶ 11. Identifying a tooth color involves “comparing the determined tooth color to a plurality of electronically stored tooth shades.” *Id.* ¶ 13. The color information of the patient’s tooth may be compared to the plurality of tooth shade guides on a pixel-by-pixel basis. *Id.* ¶ 17.

4. *Pye (Ex. 1012)*

Pye relates to “tooth shade analysis tools.” Ex. 1012, 1:6–7. Pye describes that “known techniques do not appear to desirably address limitations that exist in processing, communications, storage, and/or other capabilities with respect to hardware or software equipment used in shade analyzing.” *Id.* at 2:34–38. To improve on known techniques, Pye discloses “tooth shade scan systems and methods . . . in which shade information for a restorative product for a patient’s tooth is obtained.” *Id.* at 2:43–46. Pye’s system “displays an image of the patient’s tooth and displays dividers by which an operator can divide the tooth into regions of

interest or into regions that correspond to major tooth regions (e.g., the incisal, central, etc.).” *Id.* at 2:49–53. “Once regions of interest are identified, color characteristics for those regions are obtained.” *Id.* at 3:1–2.

Figure 5, reproduced below, shows

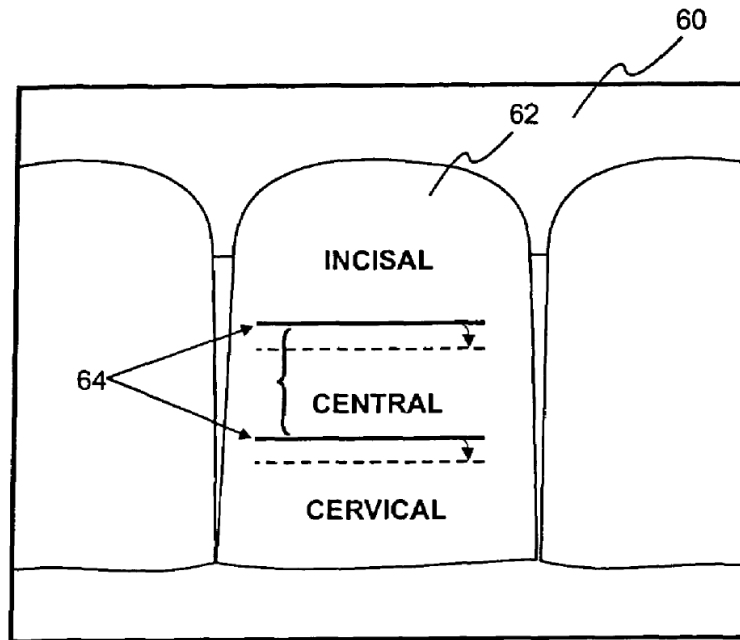


Figure 5 shows a diagram of a user interface in a shade analyzing system, showing image 60 or a patient's mouth, with tooth 62, and lines 64 that divide the tooth into three regions: incisal, central, and cervical. Ex. 1012, 7:51–61.

#### 5. Babayoff (Ex. 1013)

Babayoff, titled “Method for Providing Data Associated with the Intraoral Cavity,” “relates to color three-dimensional numerical entities representative of tissues, particularly of the intraoral cavity” and more particularly, “the manipulation of such entities to provide data that is useful in procedures associated with the oral cavity, [e]specially dental surfaces thereof.” Ex. 1013, code (54), 1:16–22. Relevant to this proceeding, Babayoff discloses a system that differentiates between two types of tissue,

for example, hard tissue, such as teeth and soft tissue, such as gums, tongue, cheeks, and lips. *Id.* at 4:25–39; 21:1–12.

## II. ANALYSIS - JOINDER UNDER 35 U.S.C. § 315(C)

Joinder in *inter partes* review proceedings is subject to the provisions of 35 U.S.C. § 315(c):

(c) JOINDER.—If the Director institutes an inter partes review, the Director, in his or her discretion, may join as a party to that inter partes review any person who properly files a petition under section 311 that the Director, after receiving a preliminary response under section 313 or the expiration of the time for filing such a response, determines warrants the institution of an inter parties review under section 314.

“To join a party to an instituted [*inter partes* review (IPR)], the plain language of § 315(c) requires two different decisions.” *Facebook, Inc. v. Windy City Innovations, LLC*, 973 F.3d 1321, 1332 (Fed. Cir. 2020). “First, the statute requires that the Director (or the Board acting through a delegation of authority) . . . determine whether the joinder applicant’s petition for IPR ‘warrants’ institution under § 314.” *Id.* “Second, to effect joinder, § 315(c) requires the Director to exercise h[er] discretion to decide whether to ‘join as a party’ the joinder applicant.” *Id.*

As the moving party, Petitioner bears the burden of proving that it is entitled to joinder. 37 C.F.R. § 42.20(c). A motion for joinder should: (1) set forth the reasons joinder is appropriate; (2) identify any new grounds of unpatentability asserted in the petition; and (3) explain what impact (if any) joinder would have on the trial schedule for the existing review. *See Kyocera Corp. v. Softview LLC*, IPR2013-00004, Paper 15 at 4 (PTAB Apr. 24, 2013).

A motion for joinder must be filed “no later than one month after the institution date of any *inter partes* review for which joinder is requested.” 37 C.F.R. § 42.122(b).

*A. Whether the Petition Warrants Institution*

Petitioner moves to join the Petition with the Medit IPR. Mot. 1. Petitioner contends that “Joinder with the Medit IPR is appropriate because the . . . Petition involves the same patent, challenges the same claims, relies on the same expert declaration, and is based on the same grounds and combinations of prior art submitted in the Medit” IPR. *Id.* at 5 (a “me-too” petition). Petitioner adds that “[b]ecause these proceedings are substantively identical, good cause exists for joining this proceeding with the Medit IPR so that the Board can efficiently resolve all grounds in both the [Petitioner’s] and Medit Petitions in a single proceeding.” *Id.*

Patent Owner opposes the Motion, arguing that we should exercise our discretion to deny the Motion under our precedential decision in *General Plastic Indus. Co. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper 19 (PTAB. Sept. 6, 2017) (“*General Plastic*”). Opp. 1.

“Under 35 U.S.C. § 315(c), the discretion of the Director to join a party to an ongoing IPR is premised on the Director’s determination that the petition warrants institution.” *Apple Inc. v. Uniloc 2107 LLC*, IPR2020-00854, Paper 9, 5 (PTAB Oct. 28, 2020) (precedential) (“*Uniloc*”). Accordingly, under the inquiry of whether the Petition warrants institution, we must “determine whether application of the *General Plastic* factors warrants the exercise of discretion to deny the Petition under § 314(a).” *Id.*

1. *General Plastic Analysis*

In *General Plastic*, the Board articulated a list of factors to be considered in evaluating whether to exercise discretion under 35 U.S.C. § 314(a) to deny a petition that challenges a patent that was previously challenged before the Board. *General Plastic*, 15–16; *see also* Consolidated Trial Practice Guide, 55–58 (stating that the Board will consider the *General Plastic* factors when determining whether to institute a trial) (“CTPG”).<sup>9</sup> These factors are:

1. whether the same petitioner already previously filed a petition directed to the same claims of the same patent;
2. whether at the time of filing of the first petition the petitioner knew of the prior art asserted in the second petition or should have known of it;
3. whether at the time of filing of the second petition the petitioner already received the patent owner’s preliminary response to the first petition or received the Board’s decision on whether to institute review in the first petition;
4. the length of time that elapsed between the time the petitioner learned of the prior art asserted in the second petition and the filing of the second petition;
5. whether the petitioner provides adequate explanation for the time elapsed between the filings of multiple petitions directed to the same claims of the same patent;
6. the finite resources of the Board; and
7. the requirement under 35 U.S.C. § 316(a)(11) to issue a final determination not later than 1 year after the date on which the Director notices institution of review.

*General Plastic*, 16 (citing *NVIDIA Corp. v. Samsung Elecs. Co.*, IPR2016-00134, Paper 9 at 6–7 (PTAB May 4, 2016)); *see also* CTPG, 56–57. Both Petitioner and Patent Owner address these factors (*see*

---

<sup>9</sup> Available at <https://www.uspto.gov/patents/ptab/trials/practice-guides>.

Mot. 9–13; Opp. 3–13; Reply 1–5), and we now apply the *General Plastic* factors to the facts of this case.

*a. Factor 1*

The first *General Plastic* factor asks “whether the same petitioner previously filed a petition directed to the same claims of the same patent.” *General Plastic*, 16. Petitioner acknowledges that it previously filed a petition challenging the ’151 patent. Motion 11; Reply 1; *see also* Opp. 3 (“[Petitioner] previously filed a Petition challenging [c]laims 1–3, 6, 7, and 9–17 of the ’151 [p]atent.” (citing Ex. 1006, 1–2)). The previous petition was denied *on the merits*. *See* IPR2023-00400, Paper 7. This situation differs from the facts in our precedential decision in *CODE200, UAB*, where the Director distinguished *Uniloc* because in *CODE200*, the first petition was not denied on the merits. *See CODE200, UAB v. Bright Data Ltd.*, IPR2021-00861, Paper 18, 4–5 (PTAB Aug. 23, 2022) (“[A]llowing [a petitioner] the opportunity to pursue a decision on the merits’ in a second-filed petition, when the first-filed petition was not evaluated on the merits, ‘best balances the desires to improve patent quality and patent-system efficiency against the potential for abuse of the review process by repeated attacks on patents.’” (quoting *Intel Corp. v. VLSI Tech. LLC*, IPR2022-00366, Paper 14, 9–10 (June 8, 2022)) (Vidal) (precedential) (“*CODE200*”).

We note, however, that Petitioner’s first petition and this Petition challenge different claims of the ’151 patent. *Compare* Pet. 1 (challenging claims 1, 2, 4, 5, 9, 10, and 12–17), *with* Ex. 1006, 1 (challenging claims 1–3, 6, 7, and 9–17). That is, Petitioner challenges claims 4 and 5 here—claims not challenged in the first petition.

This factor weighs in favor of discretionary denial. The weight of this factor is limited by the fact that Petitioner is challenging two claims not challenged in the first petition.

*b. Factors 2 and 4*

The second *General Plastic* factor asks whether at the time of the filing the petitioner knew or should have known of the prior art. *General Plastic*, 9. The fourth factor asks what is the length of time that elapsed between the time the petitioner learned of the prior art asserted in the second petition and the filing of the second petition. *Id.*

The parties do not dispute that Petitioner was unaware of at least one of the prior art references in the Medit IPR. *See* Mot. 11 (“[C]ounsel for [Petitioner] represents that, at the time of filing of the first petition, the counsel for [Petitioner] in any proceeding against 3Shape was not aware of three of the five prior art references on which the Medit IPR was instituted.”); Opp. 5–6 (explaining how Petitioner was aware of at least two of the three references); Reply 2 (“Ultimately, there is no dispute that Petitioner was not aware of Lehmann II.”). The instant Petition relies on Lehmann II to challenge all Challenged Claims. *See* Pet. 3–4.

We do not find persuasive Patent Owner’s argument that a “skilled searcher” should have located Lehmann II. *See* Opp. 6. We find credible Petitioner’s assertion that it employed a skilled searcher in support of finding prior art for the parallel litigation and Lehmann II was not identified. *See* Ex. 1018, 11–13 (providing a listing of prior art references for the ’151 patent). The fact that Patent Owner was able to craft a post-hoc search and identify Lehmann II does not sufficiently demonstrate that a skilled searcher could conduct a proper search and not locate Lehmann II.

The situation here is distinguishable from *Uniloc*, where the petitioner “did not explain its knowledge of the prior art” and the panel could not “determine how much time elapsed between Apple’s knowledge of the prior art in the 023 IPR and the filing of its second petition.” *Uniloc*, 9, 11. Petitioner here explains its knowledge of the prior art and that it did not know of one of the references prior to the filing of the Medit IPR.

We note, however, that in the Medit IPR, we determined, on the limited record at institution, that, with respect to the Lehmann II-based grounds, “Patent Owner identifie[d] a weakness in [Medit]’s position.” Medit IPR, Paper 6, 31. As such, the significance of Petitioner not being aware of Lehmann II is tempered by this determination. That is, if Petitioner was aware of Lehmann II at the time of filing the first petition, that knowledge may not have led to the first petition being instituted. Accordingly, we find that factors 2 and 4 weigh against discretionary denial, but not strongly so.

*c. Factor 3*

The third *General Plastic* factor asks “whether at the time of filing of the second petition the petitioner already received the patent owner’s preliminary response to the first petition or received the Board’s decision on whether to institute review in the first petition.” *General Plastic*, 16. The Board explained the relevance of this factor in *General Plastic* in terms of unfair benefit to petitioners from follow-on petitions:

[F]actor 3 is directed to Petitioner’s potential benefit from receiving and having the opportunity to study Patent Owner’s Preliminary Response, as well as our institution decisions on the first-filed petitions, prior to its filing of follow-on petitions . . . . Multiple, staggered petitions challenging the same patent and same claims raise the potential for abuse. The absence of any

restrictions on follow-on petitions would allow petitioners the opportunity to strategically stage their prior art and arguments in multiple petitions, using our decisions as a roadmap . . . . All other factors aside, this is unfair to patent owners and is an inefficient use of the *inter partes* review process and other post-grant review processes.

*General Plastic*, 17–18 (internal citation and footnote omitted). Petitioner argues that “given that different art is raised in the Medit Petition than in IPR2023-00400,” the Preliminary Response and Institution Decision in IPR2023-00400 “do not provide Petitioner with any benefit.” Mot. 12.

Patent Owner argues that “there is overlap in prior art disclosures between [Petitioner]’s first and second Petitions.” Opp. 8. Patent Owner adds that Petitioner “benefit[s] from both the Patent Owner’s and the Board’s characterizations of the Babayoff and Graham/Pye disclosures.” *Id.* at 8–9. Petitioner replies that “there can be no dispute that the majority of the prior art raised in Medit’s IPR is different than in Petitioner’s first IPR petition.” Reply 3.

Patent Owner does not assert, nor do we discern, any evidence that the petition in the Medit IPR (and, consequently, the “me-too” petition here) was “refined based on lessons learned from” the Preliminary Response or Institution Decision in IPR2023-00400. That is, there is no evidence or arguments before us that Medit benefitted from a roadmap provided by the Preliminary Response or Institution Decision in IPR2023-00400 in drafting its petition. Nor is there any evidence that Petitioner and Medit attempted to

manipulate the *inter partes* review system to harass Patent Owner through serial petitions.<sup>10</sup>

Still, it is undisputed that Petitioner had the potential to benefit from the Preliminary Response and Institution Decision resulting from the first petition. Our precedential decision in *Uniloc* is on point here. As *Uniloc* explains, “the third *General Plastic* factor addresses whether [the petitioner] had access to a Board decision or a preliminary response concerning its first petition, such that [the petitioner] would have been in a position to gain a benefit from having that information before filing its second petition.” *Uniloc*, 10. The panel in *Uniloc* concluded that “[t]he timing of events here shows that [the petitioner] indeed had two Board decisions concerning its first petition, the decision denying institution and a decision of the request for rehearing of that decision. Consequently, we conclude that the third *General Plastic* factor weighs in favor of denying institution of the proceeding.” *Id.*

Similar to *Uniloc*, we find that factor 3 weighs in favor of discretionary denial.

*d. Factor 5*

The fifth *General Plastic* factor asks “whether the petitioner provides adequate explanation for the time elapsed between the filings of multiple petitions directed to the same claims of the same patent.” *General Plastic*, 16. Our rules establish the timing for filing a motion for joinder. *See* 37 C.F.R. § 42.122(b) (limiting the timing for a motion for joinder to “no

---

<sup>10</sup> As we indicate in Section I.C above, Petitioner and Medit Corporation are involved in different lawsuits against Patent Owner.

later than one month after the institution date of any *inter partes* review for which joinder is requested”).

Accordingly, we find that factor 5 is neutral.

*e. Factor 6*

The sixth *General Plastic* factor considers “the finite resources of the Board.” *General Plastic*, 16. Petitioner argues that “[t]he Board has recognized numerous times since *Uniloc* that ‘Board resources are not a concern [where a new party joins a pending petition] because this panel has the capacity to see the [Medit] IPR to its conclusion regardless of the constitution of the petitioner.’” Mot. 13 (quoting *Google v. Express Mobile*, IPR2022-00791, Paper 15 at 12 (PTAB Oct. 7, 2022) (“*Express Mobile*”)).

Patent Owner argues that Petitioner failed to arrange a call with the panel with five days of filing the Motion as provided in the CTPG, and instead sent an email to the Board three weeks after filing the motion. Opp. 12. Patent Owner argues that a call has yet to be held. *Id.* Patent Owner argues that, if a call was timely held, it would have indicated that its Preliminary Response has new arguments that would have led to a different institution decision. Petitioner replies that “[t]he scheduling of an optional conference call does not weigh for or against institution.”

In *Uniloc*, the petitioner, Apple, was similarly situated to Petitioner here. Apple had previously submitted a petition that was denied on its merits. *Uniloc* at 5–6. Apple then filed a “me-too” petition seeking to join Microsoft’s proceeding instituted against the same patent. *Id.* at 6. At the time of this second filing, Apple was time-barred under 35 U.S.C. § 315(b). *Id.* In deciding not to join Apple to the Microsoft proceeding, the Board was concerned that, should Microsoft settle with the patent owner, then Apple

would move from its understudy role to the primary petitioner, giving Apple a second bite at the challenged patent despite being time-barred. *Id.* at 12. The Board concluded that, by continuing the proceeding, Apple would use Board resources that would otherwise have been freed, and found that this factor favored discretionary denial. *Id.*

We agree with Petitioner that its failure to follow the guidance in the CTPG does not affect our findings under this factor—the panel had the opportunity to conduct a call and chose not to. Also, the Board has already allocated resources to complete the Medit IPR. *Cf. Advanced Micro Devices, Inc. v. Monterey Research, LLC*, IPR2021-00776, Paper 13, 17 (PTAB Oct. 13, 2021) (declining to speculate that the primary petitioner would settle, and finding that Board resources had already been allocated to the primary proceeding). For the same reasoning in our precedential decision in *Uniloc*, however, we find that factor 6 somewhat favors discretionary denial.

We find that *Express Mobile*, upon which Petitioner relies, is distinguishable. In that case, the petitioner seeking joinder was one in a long list of petitioner entities, reducing the change that the petitioner seeking joinder would ultimately become the primary petitioner. *Express Mobile*, 12.

*f. Factor 7*

The seventh *General Plastic* factor considers “the requirement . . . to issue a final determination not later than 1 year after the date on which the Director notices institution of review.” *General Plastic*, 16. In *CODE200*, the Director found that this factor has little relevance in a joinder context, as the statute provides for joinder even for a time-barred petitioner. *CODE200*

at 6. And here, Petitioner argues that it will serve in an understudy role and not disrupt the current schedule. Mot. 13.

We find that factor 7 is neutral.

*g. Summary and Conclusion*

In summary, we determine that factors 1, 3, and 6 weigh in favor of discretionary denial, factors 2, and 4 weigh against discretionary denial, and factors 5 and 7 are neutral. Considering these factors as a whole, and on this record, we determine that the facts here weigh in favor of exercising discretion under 35 U.S.C. § 314(a) to deny institution. Significant to our analysis is that the similarities in the facts in the instant proceeding and *Uniloc* outweigh the differences. Specifically, the primary difference between the facts here and the facts in *Uniloc* is that Petitioner explained its knowledge of the prior art and, as to *Lehmann II*, Petitioner demonstrated that it was not aware of *Lehmann II* prior to filing the first petition. In *Uniloc*, Apple made no such showing. As we discuss above, however, the significance of *Lehmann II* in this proceeding may be limited, given our initial determination of the merits of Patent Owner’s arguments against *Lehmann II* in the *Medit IPR*. As such, the lack of knowledge of *Lehmann II* is insufficient to counter the similarities between this proceeding and *Uniloc*.

*2. Merits Analysis*

Having decided to exercise discretion to deny institution, we need not turn to the merits of the Petition and Motion.

### III. CONCLUSION

We determine that exercising our discretion to not institute this proceeding is warranted based on our precedential decisions in *General Plastic* and *Uniloc*. Accordingly, the Petition and Motion are denied.

### IV. ORDER

It is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), *inter partes* review is *denied*; and

FURTHER ORDERED that Petitioner's Motion for Joinder with IPR2023-01315 is *denied*.

IPR2024-00849  
Patent 10,695,151 B2

PETITIONER:

John T. McKee  
James M. Glass  
Richard W. Erwine  
QUINN EMANUEL URQUHART & SULLIVAN LLP  
johnmckee@quinnemanuel.com  
jimglass@quinnemanuel.com  
richarderwine@quinnemanuel.com

FOR PATENT OWNER:

Todd R. Walters  
Roger H. Lee  
Mythili Markowski  
Andrew R. Cheslock  
James T. Moore  
BUCHANAN INGERSOLL & ROONEY PC  
todd.walters@bipc.com  
roger.lee@bipc.com  
mythili.markowski@bipc.com  
andrew.cheslock@bipc.com  
james.moore@bipc.com