

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD. AND
SAMSUNG ELECTRONICS AMERICA, INC.

Petitioners,

v.

MAXELL, LTD.,
Patent Owner

Case IPR2025-01314

U.S. Patent No. 8,180,198

**PATENT OWNER'S SUR-REPLY IN SUPPORT OF RESPONSE TO
PETITION FOR *INTER PARTES REVIEW* OF U.S. PATENT NO.
8,180,198**

Mail Stop **Patent Board**
Patent Trial and Appeal Board
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

TABLE OF CONTENTS

	Page
I. INTRODUCTION	1
II. CLAIM CONSTRUCTION	1
A. The Plain and Ordinary Meaning of “Retrieve”	1
B. The ’198 Patent’s Intrinsic Retrieval Record.....	3
C. Nagaoka Does Not Disclose Retrieval	7
III. Ground 1: Petitioners Fail to Establish that Claims 1-4, 6, and 9-11 Are Rendered Obvious by Nagaoka	8
A. Claim 6 Requires a Separate Analysis	9
1. Petitioners Fail to Demonstrate that Nagaoka Renders Obvious Claim 6	9
B. Nagaoka Does Not Disclose Control-Module Selection.....	10
2. Petitioners Fail to Demonstrate that Nagaoka Renders Obvious Limitations [1b] and [6b]	10
C. Nagaoka Does Not Disclose Retrieval Based on the Same Related Information.....	11
3. Petitioners Fail to Demonstrate that Nagaoka Renders Obvious Limitations [1c.i], [6c], and [6d]	11
D. Nagaoka Does Not Disclose the Remaining Limitations.....	16
4. Petitioners Fail to Demonstrate that Nagaoka Renders Obvious Limitations [1c.ii]-[1c.iv] and [6e]-[6g].....	16
E. Dependent Claims	17
5. Petitioners Fail to Demonstrate that Nagaoka Renders Obvious Claims 2-4 and 9-11	17
IV. Ground 2: Petitioners Fail to Establish that Claims 5 and 12 are Rendered Obvious by Nagaoka in View of Benyamin	17
V. Ground 3: Petitioners Fail to Establish that Claims 7 and 13 are Rendered Obvious by the Combination of Nara and Nagaoka	17
A. Motivation to Combine	17
1. Petitioners Fail to Articulate Motivation to Combine Nara with Nagaoka.....	17

B.	Claim 13’s Dubbing Requirements	19
2.	Petitioners Fail to Demonstrate that the Combination of Nagaoka and Nara Renders Obvious Claim 13.....	19
VI.	Ground 4: Petitioners Fail to Establish that Claims 14-15 are Rendered Obvious by the Combination of Nara, Nagaoka, Benjamin, and Imada	20
A.	Motivation to Combine	20
1.	Petitioners Fail to Articulate a Motivation to Combine Nagaoka, Nara, Benjamin, and Imada	20
VII.	Ground 5: Petitioners Fail to Establish that Claims 8 and 16 are Rendered Obvious by the Combination of Nagaoka, Nara, and Benjamin.....	21
VIII.	Ground 6: Petitioners Fail to Establish that Claims 1-16 are Rendered Obvious by Watanabe in View of Looney, Platt, and Kaplan.....	21
A.	Independent Claims.....	22
1.	Petitioners Fail to Demonstrate that the Combination of Watanabe and Looney Renders Obvious Limitations [1pre], [1a], [1b], [6pre], [6a], and [13a]22	
2.	Petitioners Fail to Demonstrate that the Combination of Watanabe, Looney, and Platt Renders Obvious Limitations [1c.i], [6c], [6d], [13b], [13c], and [13d]24	
3.	Petitioners Fail to Demonstrate that the Combination of Watanabe and Looney Renders Obvious Limitations [1c.ii], [1c.iii], [1c.iv], [6e], [6f], [6g], [13e], [13f], and [13g].....	26
B.	Dependent Claims	26
4.	The Combination of Watanabe, Looney, and Platt Fails to Render Obvious Claims 2-3 and 10-12.....	26
5.	The Combination of Watanabe, Looney, Platt, and Kaplan Fails to Render Obvious Claim 4	26
6.	The Combination of Watanabe, Looney, and Platt Fails to Render Obvious Claims 7-9.....	27
7.	The Combination of Watanabe, Looney, and Platt Fails to Render Obvious Claims 5 and 16	27

8.	The Combination of Watanabe, Looney, and Platt Fails to Render Obvious Claim 15.....	28
IX.	CONCLUSION.....	29

TABLE OF AUTHORITIES

	Page(s)
 Cases	
<i>Amado v. Microsoft Corp.</i> , 2004 U.S. Dist. LEXIS 31222 (C.D. Cal. Aug. 20, 2004)	2-4
<i>Cook Group Inc. v. Boston Scientific Scimed, Inc.</i> , Case No. IPR2017-00131, Paper 13 (P.T.A.B. May 15, 2017).8- 9, 16-20	
<i>In re Bigio</i> , 381 F.3d 1320 (Fed. Cir. 2004).....	18
<i>In re Heck</i> , 699 F.2d 1331 (Fed. Cir. 1983).....	18, 20, 23
<i>KSR Int’l Co. v. Teleflex Inc.</i> , 550 U.S. 398 (2007).....	18, 20
<i>Phillips v. AWH Corp.</i> , 415 F.3d 1303 (Fed. Cir. 2005) (en banc).....	1-6
 Other Authorities	
35 U.S.C. § 103.....	18-23
35 U.S.C. § 316(e).....	8-9, 16-20, 23-30
37 C.F.R. § 42.23(b).....	1, 11, 29-30
37 C.F.R. § 42.24(a), (d).....	31
37 C.F.R. § 42.104(b), (b)(5).....	8-9, 16-20

PATENT OWNER'S EXHIBIT LIST

Description	Exhibit #
Notice Letter to Samsung (July 7, 2021)	2001
Follow-up Notice Letter to Samsung (December 29, 2021)	2002
Docket Navigator Time to Trial Statistics for the Eastern District of Texas	2003
Docket Control Order, Maxell, Ltd. v. Samsung Elecs. Co., Ltd., No. 5:25-cv-00052-RWS (E.D. Tex.)	2004
Jury Trial Transcript, Vol. 4, Maxell, Ltd. v. Samsung Elecs. Co., Ltd., No. 5:23-cv-00092-RWS (E.D. Tex.)	2005
Complaint, Maxell, Ltd. v. Samsung Elecs. Co., Ltd., No. 5:25-cv00052-RWS (E.D. Tex.)	2006
Follow-up Notice Letter to Samsung (April 21, 2025)	2007
Law360 Article, "Maxell Settles Patent Suit Against Apple Over Mobile Tech"	2008
Law360 Article, "Maxell Scores \$43M EDTX Jury Win In ZTE Patent Trial"	2009
Law360 Article, "Maxell, Huawei Reach Terms To End Smartphone Patent Suit"	2010
Hudson Institute Article, "Google's Loss to Sonos Settles It, Big Tech Has an IP Piracy Problem"	2011
PatentRenewal.com Article, "which-companies-hold-the-mostpatents-in-the-world"	2012
Motion for Partial Summary Judgment of Validity Based on Sotera Stipulations, Maxell, Ltd. v. Samsung Elecs. Co., Ltd., No. 5:23-cv00092-RWS (E.D. Tex.)	2013
Follow-up Notice Letter to Samsung (November 28, 2024)	2014
Petitioners' Invalidity Contentions (October 28, 2025)	2015
Declaration of Tariq Javed in Support of Patent Owner's Motion for Pro Hac Vice Admission Pursuant to 37 C.F.R. § 42.10(c)	2016
Declaration of Ravin Balakrishnan, Ph.D.	2017
<i>retrieve</i> , Microsoft Computer Dictionary (5th ed. 2002).	2018

Case IPR2025-01314
Patent No. 8,180,198
Patent Owner's Sur-Reply

<i>Retrieval, retrieve</i> , Bloomsbury Dictionary of Computing (5th ed. 2004).	2019
Deposition Transcript of Benjamin B. Bederson, Ph.D (April 29, 2026)	2020
Curriculum Vitae of Ravin Balakrishnan, Ph.D.	2021

LISTING OF CHALLENGED CLAIMS

Claim Element	CLAIMS
[1pre]	A digital image recording and reproducing apparatus connectable to a display module, said apparatus comprising:
[1a]	an output module which displays a plurality of digital images and a plurality of related information concerning said digital images recorded in a recording medium on the display module, each digital image corresponding to one of said plurality of related information; and
[1b]	a control module which selects a digital image to add in a playlist, based on one of the plurality of information concerning the digital image recorded in said recording medium;
[1c.i]	wherein for a selected digital image selected by the user, said control module; retrieves other digital images whose related information is the same as the selected digital image, the other digital images being candidates for adding in said playlist,
[1c.ii]	outputs a list identifying the other digital images retrieved based on their related information to select another digital image to add in said playlist when said another digital image is selected from other digital images as the candidates by the user,
[1c.iii]	outputs said playlist including a plurality of said digital images added, wherein said plurality of digital images, said plurality of related information, said list identifying the other digital images, and said playlist are outputted in a same display, and
[1c.iv]	outputs one of the other digital images to be positioned next to another one of the other digital images in said list identifying the other digital images.
[2]	The digital image recording and reproduction apparatus according to claim 1, wherein said control module rearranges the information showing said selected digital image, based on related information concerning a digital image other than the related information concerning the digital image specified by the user and adds the rearranged information to said display module for display.
[3]	The digital image recording and reproduction apparatus according to claim 2, wherein said control module displays information concerning a digital image in which information

Claim Element	CLAIMS
	showing said selected digital image is rearranged.
[4]	The digital image recording/reproduction apparatus according to claim 1, wherein a reduced image is displayed on said display module as the information showing the digital image selected by said control module.
[5]	The digital image recording and reproducing apparatus accordingly to claim 1, wherein for a selected digital image selected by the user, said control module outputs a telop to select another digital image from a plurality of the other digital images to add in said playlist when the telop is selected.
[6pre]	A method for creating a playlist designating an reproduction order for image data reproduced from a recording medium having a plurality of image data and associated information concerning said image data that are recorded thereon, said method comprising:
[6a]	listing the associated information concerning an image data recorded on said recording medium as a program list;
[6b]	receiving, from a user, selection of a desired image data to be registered with a playlist from said program list;
[6c]	retrieving an image data associated with associated information selected, from associated information concerning said selected image data;
[6d]	retrieving other image data whose related information is the same as the desired image data selected by the user, the other digital images being candidates for adding in said playlist;
[6e]	listing information identifying said other image data to select another digital image to add in said playlist when said another digital image is selected from other digital images as the candidates by the user;
[6f]	displaying said plurality of image data, said associated information, said listed information identifying the other image data, and said playlist including a plurality of said digital image data added in a same display; and
[6g]	displaying one of the other digital image data to be positioned next to another one of the other digital image data in said list identifying the other digital image data.
[7]	The method for creating a playlist according to claim 6, wherein said image data is a recorded program and information identifying said image information is a program title and/or a

Claim Element	CLAIMS
	program time zone.
[8]	The method for creating a playlist according to claim 7, wherein said selecting-menu contains a selecting-menu used for registering all image data retrieved.
[9]	The method for creating a playlist according to claim 7, wherein a retrieval condition used in retrieving said selected image data is displayed.
[10]	The method for creating a playlist according to claim 7, wherein when information identifying said retrieved image data is added to a display, the information is rearranged for display based on associated information different from a retrieval condition used for the retrieval.
[11]	The method for creating a playlist according to claim 6, wherein when information identifying said retrieved image data is added to a display, the information is rearranged for display based on associated information different from a retrieval condition used for the retrieval.
[12]	A method for creating a playlist according to claim 6, wherein for a selected digital image selected by the user, displaying a selection menu including a telop to determine whether or not to register a plurality of said other image data to add in said playlist, when the telop is selected.
[13a]	A dubbing list-creating method for selecting an image data in dubbing from a recording medium having a plurality of image data and associated information thereof that are recorded thereon to another recording medium, said method comprising:
[13b]	receiving, from a user, selection of desired image information to be registered with a dubbing list from said program list;
[13c]	retrieving image information associated with image information selected, from the associated information concerning the selected image data;
[13d]	retrieving other digital images whose related information is same as the one of the digital images selected from other digital images as the candidates by the user, the other digital images being candidates for adding in said playlist;
[13e]	listing information identifying the retrieved image information;
[13f]	displaying said plurality of image data said associated information, said listed information identifying said retrieved image information, and said dubbing list including a plurality

Claim Element	CLAIMS
	of said digital image data added in a same display; and
[13g]	displaying one of the other digital image data to be positioned next to another one of the other digital image data in said list identifying the other digital image data.
[14]	The dubbing list-creating method according to claim 13, wherein said selecting menu includes a telop to determine a bit rate so as to registering all the retrieved image data.
[15]	The dubbing list-creating method according to claim 14, wherein the bit rate for said image data is determined based on a recordable capacity of said another recording medium on which dubbing is made.
[16]	A dubbing list creating method according to claim 13, wherein for a selected digital image selected by the user, displaying a selection menu including a telop to determine whether or not to register a plurality of said retrieved images to add in said dubbing list when the telop is selected.

I. INTRODUCTION

Petitioners make clear that their Petition now turns on late argued claim construction positions that should be rejected. Namely, Petitioners propose new claim interpretations that are (1) untethered to the claims' plain and ordinary language, (2) not supported by their cited references, and (3) found nowhere in the Petition. Petitioners' attempt to gap fill their Petition should be rejected. The Board should reject Petitioners' arguments and find the challenged claims patentable.

Under 37 C.F.R. § 42.23(b), the Board should disregard Reply theories and evidence absent from the Petition, including: (i) a new affirmative construction of "retrieve" as "to obtain an item by locating and returning it"; (ii) a theory that Nagaoka's media organizing control unit 38 retrieves images from image memory 32; (iii) an "album covers" substitution; and (iv) a "predictable design choice" rationale for claim 15's bit rate. Patent Owner addresses each only in the alternative.

II. CLAIM CONSTRUCTION

A. The Plain and Ordinary Meaning of "Retrieve"

The POR explains and Dr. Balakrishnan's declaration supports that Patent Owner's proposed construction articulates the claim terms' plain and ordinary meaning, and Patent Owner requested that the Board expressly adopt it because

Petitioners' mapping depends on a contrary reading. *See* POR 12-19; EX2017, ¶¶51-64; Pet. 42; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005).

Petitioners, not Patent Owner, attempt to rewrite the claims. Rather than evaluate the claim language, Petitioners ask the Board to **broaden** “retrieve” to mean “to obtain an item by locating and returning it.” *See* Reply 1. Regarding limitation [1c.i], Petitioners argue that “retriev[ing] other digital images” means merely locating and returning images in a specific order. *See id.* at 2. This belated construction contravenes the plain and ordinary meaning of “retrieve”/“retrieval,” which a POSITA would understand as “to extract a subset of items from a set of stored items.” EX2017, ¶¶52, 59. Because the Petition did not propose this affirmative construction, the Board should disregard it under 37 C.F.R. § 42.23(b).

Regarding limitation [1c.i], Petitioners argue that the claims do not require “other digital images” to be retrieved “from a set of stored items.” EX1046, 18:12-19:20; Reply 2. But Petitioners thereby rewrite the claim language. Limitation [1c.i] requires “retriev[al]” of “digital images,” which a POSITA would understand to require **some** storage of those images. Dr. Balakrishnan confirms that claim 1 requires the other digital images “would be stored somewhere” before retrieval. *See* EX1046, 17:20-18:11. Thus, Samsung's assertion that “Maxell's proposed construction improperly imports

an additional limitation not found in the claim language” fails because a POSITA’s plain and ordinary understanding of “retrieve” necessarily includes storage of “other digital images” from which retrieval occurs. *See* Reply 2.

Petitioners attempt to limit Patent Owner’s plain and ordinary construction of the term “retrieve” by erroneously asserting that “Maxell appears to argue that images that are ‘pre-identified’ or ‘previously compiled and displayed’ cannot be retrieved.” *See* Reply 2 (citing POR 18-19). However, Petitioners misunderstand Patent Owner’s construction. Patent Owner’s Response states that “A POSITA would not understand this meaning [of retrieve] to include a sorting function which **merely** organizes preselected items that are previously compiled and displayed.” *See* POR 18-19; EX2017, ¶59 (emphasis added). Patent Owner does not construe retrieval function to **exclude** compiling or displaying items. Rather, **mere** organization of a **preselected** set of displayed items by itself—the only Nagaoka operation Petitioners rely on—does not amount to a retrieval function within the plain and ordinary meaning.

B. The ’198 Patent’s Intrinsic Retrieval Record

a. Petitioners’ reading of FIG. 1 is inconsistent with the intrinsic record. The specification states that “[t]he control unit 42 retrieves information associated with the other programs stored in the recording medium, based on associated information on the user-selected program and retrieval

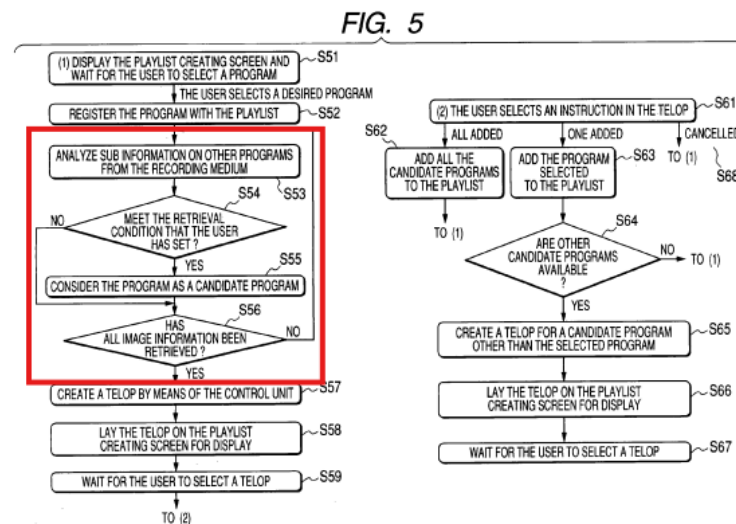
conditions, so as to select a program candidate.” EX1001, 3:14–18, FIG. 4.

Retrieval is therefore from recording medium 43, not from the display: FIG. 5's S53 analyzes sub-information on other programs drawn from the recording medium, and S54 filters those programs against the user-set retrieval condition. The telop (reference numeral 004) and Retrieval Result Screen are separate display regions generated as the output of that retrieval, not a re-sorted program list. The Background likewise describes “extracting a program that coincides in conditions such as the same time zone with the program that the user has selected from a plurality of programs recorded in a recording medium.”

EX1001, 1:31–33. Petitioners' reading would read “recorded in a recording medium” out of limitations [1a] and [1c.i]. See EX1001, FIGS. 4, 5.

As the POR explains, the specification of the '198 Patent supports construing “retrieve”/ “retrieval” as “to extract a subset of items (*i.e.*, candidate programs) from a set of stored items (*i.e.*, other programs stored in the recording medium).” See POR 12; EX2017, ¶59. Claim 1 expressly requires that, for a selected digital image, the control module “retrieves other digital images whose related information is the same as the selected digital image,” in the context of digital images and related information recorded in a recording medium. That is extraction from storage, not mere display reordering. See EX1001, claim 1. For example, the '198 Patent discloses that a user may “retrieve among the recorded

programs” (a set of stored items) specific programs (a subset of items) meeting a retrieval condition (*i.e.* “a program having a title name with the same first few letters as those of the program selected” or “a program having the same series information as that of the recorded program selected by the user”). *See* POR 12-13; EX1001, 4:15-19, 4:23-27, 5:56-61, 5:66-6:03; EX2017, ¶58. FIG. 5 of the ’198 Patent includes a flow diagram showing that, when analyzing “information on other programs” (a set of stored items) considered in Step S53, only the subset of programs that “meet the retrieval condition that the user has set” (Yes at Step S54) are extracted and considered “as a candidate program” (S55):



Id. at FIG. 5; EX2017, ¶58.

b. Petitioners’ contention that a “subset” can mean the entire set (Reply 3-4 (citing *Amado v. Microsoft Corp.*, 2004 U.S. Dist. LEXIS 31222 (C.D. Cal. Aug. 20, 2004))) misses the point. Patent Owner’s

construction turns on extracting items from a set of stored items. Even if “subset” could encompass an entire set, Nagaoka extracts nothing from storage; it reorders an already displayed set. The '198 Patent's examples return a proper subset: FIG. 1 retrieves only recorded programs 5 and 8 out of recorded programs 1-10, and FIG. 5 treats only programs that “meet the retrieval condition that the user has set” (Yes at S54) as candidate programs (S55). *See* EX1001, FIGS. 1, 5; EX2017, ¶58.

c. Petitioners' assertion that their construction is consistent with Maxell's extrinsic evidence (Reply 4) is likewise misplaced. The Microsoft Computer Dictionary and Bloomsbury Dictionary of Computing define “retrieve” and “retrieval” in terms of locating stored data and bringing it back from storage—not reordering items already on a display. *See* EX2018; EX2019; EX2017, ¶60.

d. Petitioners' assertion that no construction is necessary (Reply 1) is untenable because their Nagaoka mapping depends on reading “retrieve” to cover sorting, and Petitioners have applied the term inconsistently. *See* POR 15-19; EX2017, ¶57.

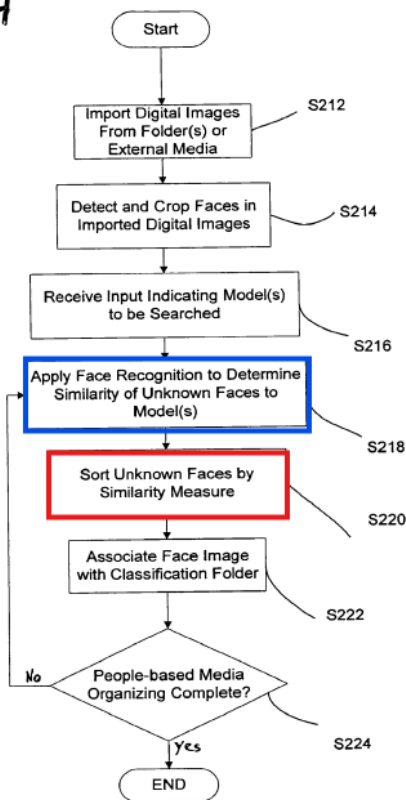
e. Petitioners' reliance on Maxell's infringement contentions regarding control-module selection, “playlist,” facial-similarity retrieval, and the alternative position that algorithmic similarity is equivalent

(EX1023, 104, 118-121, 150-52, 179) is misplaced. Infringement contentions are not intrinsic evidence and do not construe claims. The contentions' description of retrieval "from the device's storage" is consistent with—and supports—Patent Owner's construction; an alternative doctrine-of-equivalents contention is not an admission that Nagaoka's similarity measure is literally the "same" related information. *See* EX1023, 118-121; EX2017, ¶61.

C. Nagaoka Does Not Disclose Retrieval

As detailed in Section III.3 below, Nagaoka discloses only sorting a **pre-identified**, already-displayed set of **unknown faces** by similarity; it does not retrieve a subset of stored images. *See* EX1004, 5:43-49.

FIG. 4



The Board should reject Petitioners' belated construction and expressly adopt Patent Owner's construction, which articulates the plain and ordinary meaning as understood by a POSITA.

III. Ground 1: Petitioners Fail to Establish that Claims 1-4, 6, and 9-11 Are Rendered Obvious by Nagaoka

As explained below, Petitioners have not shown unpatentability of Ground 1 by a preponderance of the evidence. Petitioners' Reply does not rebut Patent Owner's arguments concerning claim limitations [1b], [6b], [1c.i], [6c], [6d], [1c.ii], [1c.iii], and [1c.iv]. As claims 2-4 and 9-11 depend on claims 1 and 6, respectively, Petitioners cannot show that Nagaoka renders obvious any of

claims 1-4, 6, or 9-11.

A. Claim 6 Requires a Separate Analysis

1. Petitioners Fail to Demonstrate that Nagaoka Renders Obvious Claim 6

Petitioners erroneously argue that their “element-by-element mapping for claim 1 is applicable to the mapping for claim 6 because of the substantive overlap between claims 1 and 6.” *See* Reply 6. Nagaoka’s Abstract does not cure that omission. It discloses a method and apparatus for organizing digital photos—extracting objects of interest, cropping them, applying a recognition algorithm to determine similarity to a reference, displaying objects arranged as a function of determined similarity, and receiving user input to associate objects with a particular classification—not a method for creating a playlist designating a reproduction order for image data reproduced from a recording medium as [6pre] requires. *See* EX1004, Abstract, 3:53-54; EX1001, claim 6. A generic recitation that an invention encompasses both a method and an apparatus says nothing about steps [6a]-[6g].

Petitioners also rely on Dr. Balakrishnan’s deposition testimony (Reply 5 (citing EX1046, 44:10-45:11, 38:10-18, 46:19-47:5)) as establishing that claims 1 and 6 are “substantively coextensive.” But testimony that two claim terms are similar does not establish that Nagaoka performs each recited step. Claim 6 recites two distinct retrieving steps—[6c] retrieving image data associated with

selected associated information and [6d] retrieving other image data whose related information is the same—plus [6a] creating a “program list”; none has a counterpart in claim 1’s single [1c.i]. Petitioners address none of these differences, including [13a]’s requirement for a second recording medium.

As *Cook Group* confirms, reciting arguments across non-identical claim language without an accompanying explanation is insufficient even at institution; it cannot satisfy the merits burden under 35 U.S.C. § 316(e). *See* 37 C.F.R. § 42.104(b)(5); *Cook Group Inc. v. Boston Scientific Scimed, Inc.*, Case No. IPR2017-00131, Paper 13, 14–15 (P.T.A.B. May 15, 2017).

B. Nagaoka Does Not Disclose Control-Module Selection

2. Petitioners Fail to Demonstrate that Nagaoka Renders Obvious Limitations [1b] and [6b]

Petitioners’ FIG. 2 signal-routing theory confuses display output with selection. The fact that the GUI is “output by the media organizing control unit 38 to the display 60” shows only that unit 38 renders a user’s selection on screen; it does not mean unit 38 made the selection. Nagaoka expressly assigns unit 38 only the functions of sorting the unknown faces by similarity measure and outputting the updated display window portion 406. *See* EX1004, 5:43-49, FIG. 2. Petitioners’ logic would make every displayed image “selected” by the control module.

Petitioners’ assertion that limitation [6b] does not require “a control

module” (Reply 9) does not resolve the independent deficiency. Limitation [6b] requires “receiving, from a user, selection of a desired image data to be registered with a playlist from said program list.” Nagaoka’s user drags a face from the “unknown” display window portion 406 into model display window portion 408 so that it may “serve as a basis for face recognition”—not to register it with any list designating a reproduction order. *See* EX1004, 5:18-29. Nagaoka’s disclosure thus remains user selection, not control-module selection, and nowhere states that the media organizing control unit 38 selects an image. *See* POR 22-29; EX2017, ¶¶99-104.

A “playlist” in the ’198 Patent designates a reproduction order for image data reproduced from a recording medium. Nagaoka never uses the word “playlist”; display window portion 408 is disclosed solely as a comparison model that “must contain at least one face image” to “serve as a basis for face recognition,” and its contents improve recognition accuracy as more faces are added. *See* EX1001, claim 6; EX1004, 5:18-29, 5:43-56.

C. Nagaoka Does Not Disclose Retrieval Based on the Same Related Information

3. Petitioners Fail to Demonstrate that Nagaoka Renders Obvious Limitations [1c.i], [6c], and [6d]

As explained above, Petitioners’ claim constructions should not apply to limitations [1c.i], [6c], and [6d] because they impermissibly broaden the scope

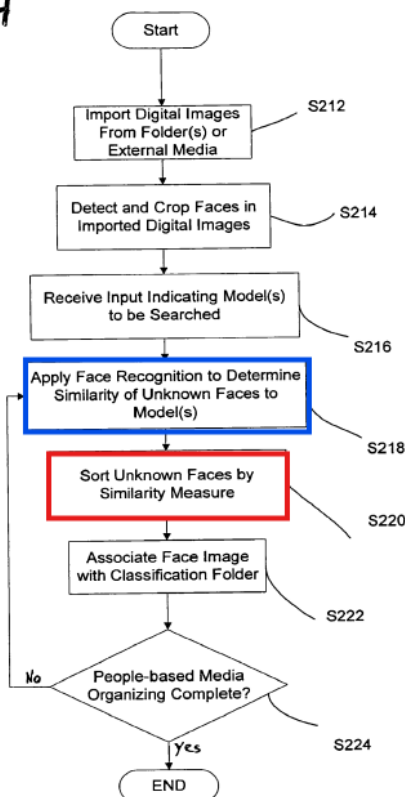
of the plain and ordinary meaning of the term “retrieve.”

Petitioners argue that, under either construction, “Nagaoka does not disclose simply sorting images on a display; rather, it discloses retrieving images, sorting them, and outputting them to a display.” Reply 13. Petitioners further argue that “**after the user drags and drops a selected face image,**” the face recognition unit applies facial recognition and the media organizing control unit retrieves the face images. Reply 14-15 (emphasis added). Petitioners’ new theory that the images are retrieved from face recognition unit 36 or image memory 32 is outside the proper scope of a reply under 37 C.F.R. § 42.23(b).

Even on the merits, Nagaoka never describes any transfer of images from unit 36 to unit 38. Nagaoka describes FIG. 6 as “an exemplary graphical user interface display screen associated with displaying face images **sorted by similarity to model face images.**” See EX1004, 5:8-11. The only disclosed operation is that “[a]fter the face recognition unit 36 obtains a similarity measure for each unknown face, the media organizing control unit 38 **sorts the unknown faces by similarity measure** (most similar to least similar) and outputs an updated ‘unknown’ display window portion 406 (FIG. 6) showing the unknown faces in **sorted** order (S220).” See EX1004, 5:43-49. Image memory 32 is described only as storing digital image data imported at S212, not as transferring images to unit 38; Petitioners’ image-memory theory rests on

testimony about what unit 38 “could” do, not a disclosure. See EX1004, 3:45-49.

FIG. 4



See EX1004, FIG. 4, which assigns detection and cropping to S214, similarity determination to S218 (highlighted in blue), and sorting to S220 (highlighted in red); EX2017, ¶56.

Detection and cropping at S214 are complete before user input at S216. When user selection occurs at S216, all faces in “imported digital images” have been detected, cropped, compiled, and displayed in the “unknown” display window portion 406. Nagaoka’s own claims describe only “displaying the images of unknown isolated faces sorted by the determined similarity” (claim 1)

and a display that “displays the faces in order of similarity to the reference model” (claim 17); its Summary likewise describes “displaying a plurality of objects of interest arranged as a function of the determined similarity.” *See* EX1004, claims 1, 17, 1:55–2:06. None recites retrieval after user selection. Instead, the updated “unknown” display window portion 406 shows the same previously displayed set in a different order. Reordering those images does not amount to retrieval within the plain and ordinary meaning of the term.

The distinction is particularly important because the claimed retrieval operation generates a candidate set. In the '198 Patent, retrieval narrows the universe of available stored items into a collection of candidate programs that satisfy the selected retrieval condition. *See* EX1001, Fig. 5, S53-S55. By contrast, Nagaoka never narrows the available set of unknown faces. The same population of unknown faces remains available both before and after user selection; only the order of presentation changes. A ranked display of an unchanged population is fundamentally different from retrieving a candidate subset from storage. Petitioners' theory improperly conflates candidate generation with visual reordering.

Nor do Nagaoka's “Show other people” and “Show all photos” buttons supply the missing retrieval. Those buttons expand the display to “all persons including people other than Momoko,” which the Petition did not rely on them.

See Reply 17; EX1004.

Petitioners' conditional argument does not cure the defect. Limitation [1c.ii] requires outputting "a list identifying the other digital images retrieved based on their related information" as the candidates, not merely displaying a set that may include images with and without the same information. A ranked display of every unknown face identifies no candidate set at **all**. See Reply 15-17; EX1004, claim 1; EX2017, ¶113.

Petitioners' storage argument (Reply 18) likewise overlooks [1a]. That limitation expressly requires "related information concerning said digital images recorded in a recording medium." Nagaoka's cited passage (EX1004, 3:61-67) describes only a GUI category list of "dates," "events," "places," and "people"; it does not state that a similarity measure is recorded in the recording medium in correspondence with stored images.

The '198 Patent's claim 1 requires retrieval of other digital images whose related information is the **same**. The '198 Patent's FIG. 5 applies a binary condition: programs either "meet the retrieval condition that the user has set" (Yes at S54) and become candidate programs at S55, or they do not. See EX1001, claim 1; FIG. 5, S53–S55. Nagaoka instead uses a continuous ranking—"most *similar to least* similar"—and does not retrieve "other digital images whose related information is the same as the selected digital image." See

EX1004, 5:43-49.

Further, modifying Nagaoka's step S220 to meet claim 1's "retrieves other digital images whose related information is the same" limitation would require more than a simple substitution or minor adjustment. *See* POR 32-33; EX2017, ¶114. Nagaoka's workflow is purposefully designed around iterative refinement of a similarity gradient. Nagaoka states that recognition results "change" as faces are added because "the accuracy of recognition improves," and that "the arrangement of unknown faces in display window portion 406 is updated as the user drags and drops unknown faces into the model display window portion 408." *See* EX1004, 5:52-67. This iterative loop—applying face recognition, sorting by similarity, receiving user input, and repeating—is the core of Nagaoka's system. Replacing it with a categorical same-information search and output would be a fundamental restructuring, not a simple substitution.

D. Nagaoka Does Not Disclose the Remaining Limitations

4. Petitioners Fail to Demonstrate that Nagaoka Renders Obvious Limitations [1c.ii]-[1c.iv] and [6e]-[6g]

Petitioners have not shown unpatentability concerning claim limitations [1c.ii]-[1c.iv] and [6e]-[6g] by a preponderance of the evidence. *See* POR 35-38.

E. Dependent Claims

5. Petitioners Fail to Demonstrate that Nagaoka Renders Obvious Claims 2-4 and 9-11

Petitioners' assertion that claims 3, 10, and 11 are "substantively coextensive with claim 2" (Reply 19) does not excuse their failure to address the limitations of each claim. As explained above, recitations across differing claims without an accompanying explanation cannot satisfy the preponderance standard. *See* POR 38-39; *Cook Group Inc. v. Boston Scientific Scimed, Inc.*, IPR2017-00131, Paper 13 at 14-15; 35 U.S.C. § 316(e).

IV. Ground 2: Petitioners Fail to Establish that Claims 5 and 12 are Rendered Obvious by Nagaoka in View of Benjamin

For the reasons above, Petitioners have not shown by a preponderance of the evidence that Nagaoka in view of Benjamin renders claims 5 or 12 unpatentable. *See* POR 39-40; Reply 19.

V. Ground 3: Petitioners Fail to Establish that Claims 7 and 13 are Rendered Obvious by the Combination of Nara and Nagaoka

For Ground 3, Petitioners have not shown that Nara and Nagaoka can be combined. *See* Reply 19-21.

A. Motivation to Combine

1. Petitioners Fail to Articulate Motivation to Combine Nara with Nagaoka

Petitioners assert that "a POSITA would have been motivated to combine Nagaoka and Nara for the reasons stated in the petition." Reply 19. However, as

explained in the POR, Nara and Nagaoka differ fundamentally in their system architectures and technical solutions, and their teachings are not naturally compatible. *See* POR 40-42; EX2017, ¶¶144-145. Nara does not relate to or mention organizing digital information using face recognition, while Nagaoka is directed to organizing digital media, particularly digital photos, using face recognition—not to reducing time and labor to back up contents from one recording medium to another or creating a dubbing list. *See* POR 41; EX1006; EX1004. Petitioners' reliance on *In re Bigio*, 381 F.3d 1320 (Fed. Cir. 2004) (Reply 19-20) does not answer this showing. Patent Owner's position is not that the references must be compared only to one another or are non-analogous art; it is that Petitioners have not articulated a motivation to combine them or a reasonable expectation of success under 35 U.S.C. § 103. Dr. Bederson identified no express teaching in Nagaoka supporting the combination and relied only on the generality that "Nagaoka provides a general system." *See* EX2020, 121:20-122:17; EX2017, ¶145.

Petitioners do not explain why organizing digital media "using face recognition" in Nagaoka would make sense in Nara's system for backing up contents from one medium to another. Reply 20-21. Petitioners invoke *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007), and *In re Heck*, 699 F.2d 1331 (Fed. Cir. 1983) (Reply 20, 22-23), but KSR still requires an articulated

reasoning with rational underpinning. Dr. Bederson could not identify any problem linking the references and conceded that no reference suggests combining them. *See* EX2020, 119:18-124:7; EX2017, ¶155. Neither Petitioners nor Dr. Bederson explains how a POSITA would modify Nagaoka's facial-recognition system to incorporate Nara's backup capabilities, much less why the resulting combination would have a reasonable expectation of success. *See* EX1003, ¶¶141-145; Pet. 69-71; Reply 19-21.

B. Claim 13's Dubbing Requirements

2. Petitioners Fail to Demonstrate that the Combination of Nagaoka and Nara Renders Obvious Claim 13

Petitioners' Reply for Ground 3 does not address the specific deficiencies identified in the POR. Reply 21. Instead, Petitioners rely on general statements regarding claim construction and repeat overbroad interpretations rejected above.

Petitioners' Reply again argues that reciting arguments across claims 1, 6, and 13 is proper because claim 13's language "is a distinction in end use of the list." Reply 21. But recitation without an accompanying explanation cannot satisfy the preponderance burden, particularly across device and method claims. Petitioners also argue that both experts agree claim 13 requires only creation of a "dubbing list," not the act of dubbing. *See* Reply 20-21; EX1046, 47:22-48:5. That characterization cannot avoid [13a], which requires "[a] dubbing list-

creating method for selecting an image data in dubbing from a recording medium ... to another recording medium.” Nagaoka does not disclose more than one recording medium, so the second medium must come from Nara; the motivation question cannot be avoided by recharacterizing dubbing as mere list creation. *See* EX1001, claim 13; EX1004, Abstract; *Cook Group Inc. v. Boston Scientific Scimed, Inc.*, IPR2017-00131, Paper 13 at 14-15; 35 U.S.C. § 316(e).

VI. Ground 4: Petitioners Fail to Establish that Claims 14-15 are Rendered Obvious by the Combination of Nara, Nagaoka, Benjamin, and Imada

For Ground 4, Petitioners have not shown that Nara, Nagaoka, Benjamin, and Imada can be combined to render claims 14-15 obvious. *See* Reply 22-23.

A. Motivation to Combine

1. Petitioners Fail to Articulate a Motivation to Combine Nagaoka, Nara, Benjamin, and Imada

Petitioners’ per-reference mapping confirms rather than cures the hindsight problem. Petitioners rely on Imada for bit-rate/capacity management, Nara for dubbing/backup onto secondary media, and Benjamin for selection-menu/telop interfaces. Reply 22-23. Imada does not supply Nagaoka’s facial-similarity retrieval; Nara supplies no retrieval-and-candidate-list mechanism; and Benjamin supplies no retrieval based on the same related information. Petitioners’ framing concedes that no single reference supplies the claimed retrieval-and-candidate-list mechanism and asks the Board to assemble isolated

features around Nagaoka's base system—the hindsight defect identified in the POR. *See* POR 44-46; EX2017, ¶155. The references span face recognition, in-vehicle music servers, HD-to-DVD backup recorders, and digital broadcast tape backup systems, and Petitioners provide no reason why a POSITA would combine those disparate systems or have a reasonable expectation of success. *See* POR 44-45. Nor do *KSR* or *In re Heck* alter the result: *KSR* still requires an articulated reasoning with rational underpinning, yet Dr. Bederson could not identify any problem linking the references and conceded that no reference suggests combining all four. *See* EX2020, 133:7-135:7; EX2017, ¶155.

VII. Ground 5: Petitioners Fail to Establish that Claims 8 and 16 are Rendered Obvious by the Combination of Nagaoka, Nara, and Benjamin

For the reasons above, Petitioners have not shown by a preponderance of the evidence that Nagaoka in view of Nara and Benjamin renders claims 8 or 16 unpatentable; claim 8 depends from claim 7, which depends from claim 6, and claim 16 depends from claim 13. *See* POR 46-48; Reply 23.

VIII. Ground 6: Petitioners Fail to Establish that Claims 1-16 are Rendered Obvious by Watanabe in View of Looney, Platt, and Kaplan

As explained below, Petitioners have not shown unpatentability of Ground 6 by a preponderance of the evidence under 35 U.S.C. § 316(e). Petitioners' Reply does not rebut Patent Owner's arguments concerning claim

limitations [1pre], [1a], [1b], [6pre], [6a], [13a], as well as [1c.i], [6c], [6d], [13b], [13c], and [13d]. Because claims 2-5, 7-12, and 14-16 depend on claims 1, 6, and 13, respectively, Petitioners cannot show that Watanabe in view of Looney, Platt, and/or Kaplan renders obvious any of claims 1-16.

A. Independent Claims

1. Petitioners Fail to Demonstrate that the Combination of Watanabe and Looney Renders Obvious Limitations [1pre], [1a], [1b], [6pre], [6a], and [13a]

Petitioners' Reply argues that Watanabe "expressly discloses" the "image data" or "digital image" required by [1pre], [1a], [1b], [6pre], [6a], and [13a], asserting that "Watanabe expressly discloses that the content managed by Watanabe's system 'may include image data.'" Reply 23 (citing EX1008, para. 0047; FIG. 13). Petitioners rely on Watanabe's "music note icons" for disclosure of image data, arguing that "the music icons in FIG. 13 (which are themselves digital images) could be replaced with album covers" and "associated with existing metadata already in Watanabe, such as an artist name, song title, etc." Reply 24. Petitioners' new album-cover substitution theory is outside the proper scope of a reply under 37 C.F.R. § 42.23(b). Moreover, Petitioners' reliance on EX1008, para. 0167, which was raised in the Petition, does not cure the deficiency. That paragraph states: "Note that, in the above embodiment, audio data is recorded and reproduced; however, image data of

movies or the like (moving images) can be recorded and reproduced.” See EX1008, para. 0167. This passing reference to “image data of movies” describes moving-image content, not the still digital images (e.g., photographs) that are individually displayed and selectable in a library list as required by the claims.

Watanabe para. 0047’s reference to “music data and image data” appears in the system-overview passage where “music is taken as one example of contents,” and nothing in Watanabe discloses that the library list display section 87 or retrieval condition setting section 81 operates on images. Section 87 is expressly described as displaying “music data read from the music data storage section 14 or an icon,” together with the contents-transferable number of times, a song title, an artist, an album title, a format, a genre, a file size, and performance time. See EX1008, paras. 0047, 0119. Nor does *In re Heck* permit Petitioners to disregard what Watanabe actually discloses: a reference is not limited to a preferred embodiment, but that principle does not supply an undisclosed image-library operation. See *In re Heck*, 699 F.2d 1331 (Fed. Cir. 1983).

Substituting album covers for music-note icons would not disclose the claimed image data or control-module selection in [1b] and [13a]. It would require redesigning Watanabe’s manual audio-library operation into candidate

retrieval based on shared recording metadata, and Petitioners offer no explanation how the substitution supplies those missing functions. *See* POR 49-53; EX2017, ¶¶189-190.

2. Petitioners Fail to Demonstrate that the Combination of Watanabe, Looney, and Platt Renders Obvious Limitations [1c.i], [6c], [6d], [13b], [13c], and [13d]

Petitioners' Reply argues that Watanabe allows a user to select a music icon by selecting "retrieval condition 81" and then retrieves other music-note icons with the same related information as the selected icon as required by [1c.i], [6c], [6d], [13b], [13c], and [13d]. *See* Reply 25 (citing EX1008, para. 0119 and FIG. 13). Again, Petitioners rely on Watanabe's "music note icons" as digital image or image data. Reply 25.

Petitioners' contention that the claims do not require each retrieved digital image to differ from the selected digital image (Reply 26) misses the related-information requirement. Identical, generic music-note icons cannot be "other digital images whose related information is the same as the selected digital image" because they carry no distinguishing related information; the artist and album information Watanabe uses attaches to the audio content, not to the icon. *See* EX1008, para. 0119.

Watanabe's Abstract confirms that the operation is selecting conditions in a retrieval condition setting section, clicking a retrieval key, searching the music

data storage section, and displaying relevant contents on the library list display section. Paragraph 0119 likewise states that section 81 is capable of retrieval from an artist, an album, and a play list—an enumerated set containing no image. Claim 9 separately recites “a retrieval condition used in retrieving said selected image data,” confirming that the retrieval condition and selected image data are distinct. *See* EX1008, Abstract, para. 0119; EX1001, claim 9.

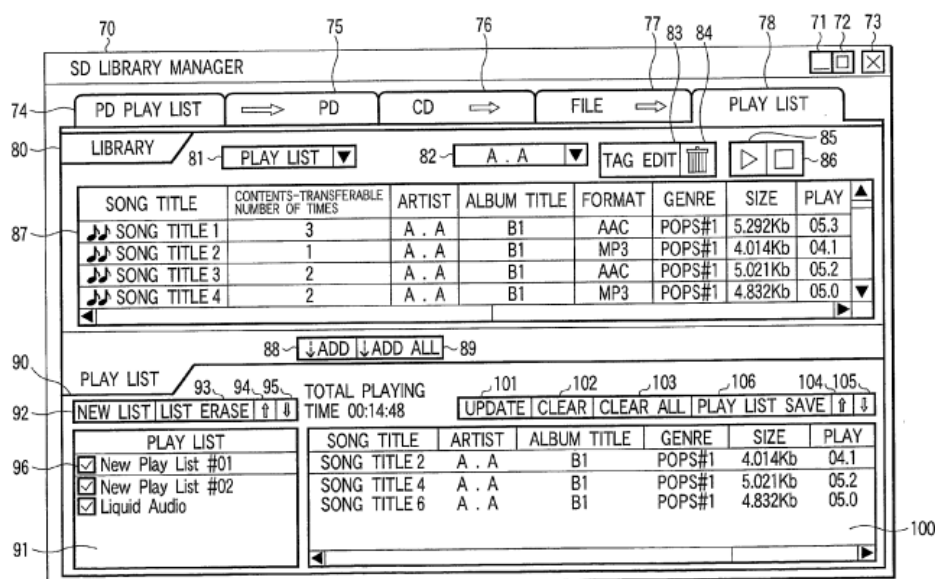


FIG. 13

Id. at FIG. 13.

Selecting an artist or album in Watanabe selects a retrieval condition, not a digital image, and does not trigger retrieval of other images whose related information is the same. Petitioners therefore have not shown [1c.i] or corresponding elements [6c], [6d], [13b], [13c], and [13d]. *See* POR 53-58;

EX2017, ¶203. *See* POR 53-58; Reply 25-27.

3. Petitioners Fail to Demonstrate that the Combination of Watanabe and Looney Renders Obvious Limitations [1c.ii], [1c.iii], [1c.iv], [6e], [6f], [6g], [13e], [13f], and [13g]

Petitioners have not shown by a preponderance of the evidence that Watanabe in combination with Looney renders obvious claim elements [1c.ii], [1c.iii], [1c.iv], [6e], [6f], [6g], [13e], [13f], and [13g]. *See* POR 58-60.

B. Dependent Claims

4. The Combination of Watanabe, Looney, and Platt Fails to Render Obvious Claims 2-3 and 10-12

Petitioners have not shown by a preponderance of the evidence that Watanabe in combination with Looney and Platt renders obvious claims 2-3 and 10-12. *See* POR 60-62, 67.

5. The Combination of Watanabe, Looney, Platt, and Kaplan Fails to Render Obvious Claim 4

Claim 4 does not cure the missing motivation. Watanabe is directed to managing the number of duplicated contents across media in medium-to-medium transmission and to reliably managing duplication of original data protected by copyright. *See* EX1008, ¶¶0002, 0005, 0006. Kaplan, by contrast, discloses a multimedia-management system for storing, manipulating, and displaying multimedia content on a single medium and does not discuss transmission or duplication between multiple media. *See* EX1016, Abstract,

¶0034. Dr. Bederson offered only the conclusory statement that the references “relate to the same general subject matter.” *See* EX2020, 136:22-137:9.

Petitioners’ combination therefore lacks an articulated motivation and a reasonable expectation of success. *See* POR 62-64; EX2017, ¶¶181-185.

6. The Combination of Watanabe, Looney, and Platt Fails to Render Obvious Claims 7-9

For claims 7-9, the Watanabe, Looney, and Platt combination supplies no teaching that cures the missing retrieval and candidate-list mechanism; Petitioners therefore have not shown by a preponderance of the evidence that these claims are unpatentable. *See* POR 60-65; EX2017, ¶¶181-185.

7. The Combination of Watanabe, Looney, and Platt Fails to Render Obvious Claims 5 and 16

The Petition cited Looney FIG. 57 merely as a bare assertion that it discloses a “telop window” (Pet. 89–90), without identifying which specific element constitutes the telop. On the merits, FIG. 57 is actually a “song editor screen” that allows editing of song metadata—artist, album, song title, year, main category, music style, dance type, music speed, and energy—not a small overlay frame displaying retrieved candidates from a user-selected item with retrieval conditions displayed. The ’198 Patent defines the telop concretely: reference numeral 004 is “a telop displayed on a display screen (i.e., a small frame displayed on a display screen in piles), which telop displays as candidate

program to be added to a playlist a program meeting any of the conditions of a program that the user has selected from the program list for playlist creation,” together with the retrieval conditions used and a “not to be registered with the playlist” option. *See* EX1001, FIG. 1, 2:45–55. A generic song-editor screen that allows editing of metadata fields does not meet this definition because it does not display retrieved candidates generated from a user-selected item or display retrieval conditions alongside a cancellation option. *See* EX1009, FIG. 57, 25:55–26:20; EX1003, paras. 167, 181; EX2017, ¶229; POR 65-67.

8. The Combination of Watanabe, Looney, and Platt Fails to Render Obvious Claim 15

Petitioners’ new “fundamental engineering consideration that does not require inventive insight” rationale (Reply 30) is conclusory, was first advanced in Reply, and is supported only by EX1003, para. 205; the Board should disregard it under 37 C.F.R. § 42.23(b). On the merits, Watanabe’s bit rate select section 151 is disclosed only as “capable of selecting and designating one for encoding from among a plurality of bit rates” in the CD edit and file edit screens, with no link to the recordable capacity of a destination medium. *See* EX1008, para. 0146. Claim 15 requires that the bit rate “is determined based on a recordable capacity of said another recording medium on which dubbing is made,” which the ’198 Patent implements by calculating the rate in advance from the total recording time of the selected and retrieved programs and the

capacity of the destination medium. *See* EX1001, claim 15, FIG. 9. EX1003, para. 205 supplies no missing link between Watanabe's selectable rates and that capacity-based determination; because claim 15 depends from claim 14, the same missing bit-rate disclosure also defeats claim 14.

IX. CONCLUSION

For at least the foregoing reasons, Petitioners have not met their burden of demonstrating the unpatentability of any challenged claim. Accordingly, Patent Owner requests the Board confirm the patentability of the challenged claims.

Case IPR2025-01314
Patent No. 8,180,198
Patent Owner's Sur-Reply

Dated: September 12, 2026

Respectfully submitted,

/Robert G. Pluta, Reg. No. 50,970/
Robert G. Pluta (Reg. No. 50,970)
Amanda S. Bonner (Reg. No. 65,224)
MAYER BROWN LLP
71 S. Wacker Drive
Chicago, IL 60606
Telephone: (312) 701-8641
Fax: (312) 706-8144
rpluta@mayerbrown.com
asbonner@mayerbrown.com

Saqib J. Siddiqui (Reg. No. 68,626)
Jaspreet K. Momi (Reg. No. 83,379)
MAYER BROWN LLP
1999 K Street NW
Washington, D.C., 20006
ssiddiqui@mayerbrown.com
jmomi@mayerbrown.com

Case IPR2025-01314
Patent No. 8,180,198
Patent Owner's Sur-Reply

CERTIFICATE OF SERVICE

I hereby certify that on this 12th day of September, 2026, a copy of the attached **PATENT OWNER'S SUR-REPLY** was served by electronic mail to the attorneys of record, at the following addresses:

James Heintz
jim.heintz@us.dlapiper.com

Blake Jackson
blake.jackson@us.dlapiper.com

Matthew Middleton
Matthew.middleton@us.dlapiper.com

With a courtesy copy by electronic mail to:
DLA-Maxell-2-IPRs@us.dlapiper.com

Respectfully submitted,

Dated: September 12, 2026
By:

/Robert G. Pluta, Reg. No. 50,970/

Robert G. Pluta (Reg. No. 50,970)

MAYER BROWN LLP

Case IPR2025-01314
Patent No. 8,180,198
Patent Owner's Sur-Reply

CERTIFICATION PURSUANT TO 37 C.F.R. § 42.24(d)

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that this Sur-Reply complies with the type-volume limitation of 37 C.F.R. § 42.24(a). The word count application of the word processing program used to prepare this Sur-Reply indicates that the Sur-Reply contains 5,594 words, excluding the parts of the brief exempted by 37 C.F.R. § 42.24(a).

Respectfully submitted,

Dated: September 12, 2026
By:

/Robert G. Pluta, Reg. No. 50,970/

Robert G. Pluta (Reg. No. 50,970)

MAYER BROWN LLP