

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

GOOGLE LLC,  
Petitioner,

v.

138 EAST LCD ADVANCEMENTS LIMITED,  
Patent Owner.

---

Case No. IPR2024-00959  
U.S. Patent No. 7,428,082

---

**PATENT OWNER'S PRELIMINARY RESPONSE**

## TABLE OF CONTENTS

|      |                                                                                                                                                                                                                                                                                                                 |    |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| I.   | PRELIMINARY STATEMENT .....                                                                                                                                                                                                                                                                                     | 1  |
| II.  | THE '082 PATENT .....                                                                                                                                                                                                                                                                                           | 2  |
| III. | CLAIM CONSTRUCTION .....                                                                                                                                                                                                                                                                                        | 11 |
| IV.  | LEGAL STANDARD .....                                                                                                                                                                                                                                                                                            | 11 |
| V.   | LEVEL OF ORDINARY SKILL IN THE ART .....                                                                                                                                                                                                                                                                        | 11 |
| VI.  | THE PETITION DOES NOT ESTABLISH A REASONABLE<br>LIKELIHOOD THAT THE ASSERTED REFERENCES RENDER<br>UNPATENTABLE ANY CHALLENGED CLAIM. ....                                                                                                                                                                       | 12 |
| A.   | The Petition does not establish a reasonable likelihood that<br>Kuwata and Fisher render obvious claims 1-3, 5-6, or 10<br>(Ground 1). ....                                                                                                                                                                     | 12 |
| 1.   | Kuwata: Overview .....                                                                                                                                                                                                                                                                                          | 12 |
| 2.   | Fisher: Overview .....                                                                                                                                                                                                                                                                                          | 15 |
| 3.   | The Petition fails to show that Kuwata and Fisher render<br>obvious all limitations of any challenged claim. ....                                                                                                                                                                                               | 16 |
| B.   | The Petition does not establish a reasonable likelihood that<br>Kuwata, Fisher, and Ohga render obvious claims 1-6 or 10<br>(Ground 2). ....                                                                                                                                                                    | 22 |
| 1.   | Ohga: Overview .....                                                                                                                                                                                                                                                                                            | 22 |
| 2.   | The Petition fails to show that Kuwata, Fisher, and Ohga<br>render obvious all limitations of any challenged claim. ....                                                                                                                                                                                        | 24 |
| C.   | The Petition does not establish a reasonable likelihood that<br>Kuwata in view of Ohga renders obvious claim 7 (Ground 3)<br>because the Petition does not show that Kuwata in view of<br>Ohga discloses claim element [7b]: “an update data acquiring<br>module configured to acquire update data of the image |    |

|    |                                                                                                                                                                                                                                                                                                                                                                                                                 |    |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
|    | processing control data based on the attribute data from the server.”.....                                                                                                                                                                                                                                                                                                                                      | 28 |
| D. | The Petition does not establish a reasonable likelihood that Ohga in view of Kuwata renders obvious claim 8 (Ground 4). .....                                                                                                                                                                                                                                                                                   | 30 |
| 1. | The Petition does not show that Ohga in view of Kuwata renders obvious claim element [8a]: “an update data storage module for storing in advance update data for image processing control data to control image processing of image data, the update data being associated with at least one of the image processing control data and identification data to identify the image processing control data.” ..... | 30 |
| 2. | The Petition does not show that Ohga in view of Kuwata renders obvious claim element [8b]: “an input module configured to input predetermined data from the peripheral device, the predetermined data including the image processing control data to be updated or the identification data.” .....                                                                                                              | 31 |
| 3. | The Petition does not show that Ohga in view of Kuwata renders obvious claim element [8c]: “an update data transmission module configured to transmit the update data corresponding to the predetermined data to the peripheral device.” .....                                                                                                                                                                  | 32 |
| 4. | The Petition does not show that Ohga in view of Kuwata renders obvious claim element [8d]: “wherein the image processing control data is to be used in processing of the image data by an image processing device that receives the image data and the image processing control data that are transferred from the peripheral device.” .....                                                                    | 33 |
| E. | The Petition does not establish a reasonable likelihood that Ohga anticipates (Ground 5) or renders obvious (Ground 6) claim 9. ....                                                                                                                                                                                                                                                                            | 34 |

|      |                                                                                                                                                                                                                                                                                                                             |    |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| 1.   | The Petition does not show that Ohga teaches or suggests claim element [9a]: “providing the update data associated with at least one of the image processing control data and identification data to identify the image processing control data.” .....                                                                     | 34 |
| 2.   | The Petition does not show that Ohga teaches or suggests claim element [9b]: “inputting predetermined data from the peripheral device, the predetermined data including the image processing control data to be updated or the identification data corresponding to the image processing control data to be updated.” ..... | 34 |
| 3.   | The Petition does not show that Ohga teaches or suggests claim element [9c]: “transmitting the update data corresponding to the predetermined data to the peripheral device.” .....                                                                                                                                         | 35 |
| VII. | CONCLUSION.....                                                                                                                                                                                                                                                                                                             | 35 |

## TABLE OF AUTHORITIES

### Cases

|                                                                       |    |
|-----------------------------------------------------------------------|----|
| <i>Phillips v. AWH Corp.</i> ,<br>415 F.3d 1303 (Fed. Cir. 2005)..... | 13 |
|-----------------------------------------------------------------------|----|

### Statutes

|                          |    |
|--------------------------|----|
| 35 U.S.C. § 314(a) ..... | 13 |
|--------------------------|----|

### Rules

|                          |    |
|--------------------------|----|
| 37 C.F.R. § 100(b) ..... | 13 |
|--------------------------|----|

## **I. PRELIMINARY STATEMENT**

Pursuant to 37 C.F.R. § 42.107, Patent Owner 138 East LCD Advancements Limited (“138 East” or “Patent Owner”) submits its Preliminary Response to the Petition for *Inter Partes* Review of U.S. Patent No. 7,428,082 (“Petition” or “Pet.”). Petitioner Google LLC challenges the validity of claims 1-10 of U.S. Patent No. 7,428,082 (“the ’082 patent”).

The Petition does not establish a reasonable likelihood that the asserted references render any of claims 1-10 unpatentable. The asserted references, alone or in combination as presented in the Grounds, do not disclose all limitations of any challenged claim. In particular, the Petition fails to meet its burden in showing why a person of ordinary skill in the art would have been motivated to combine its primary reference, Kuwata, with secondary references—indeed, the Petition overlooks key disclosures teaching away from the proposed combinations. Further, the Petition fails to show that its secondary references cure Kuwata’s key deficiencies. The Petition also fails to show that its references, alone or in combination, teach particular types of claimed data fundamental to the operation of the claimed systems and methods. The Board therefore should deny institution for failure to present a likelihood that the Petitioner will prevail on any Ground.

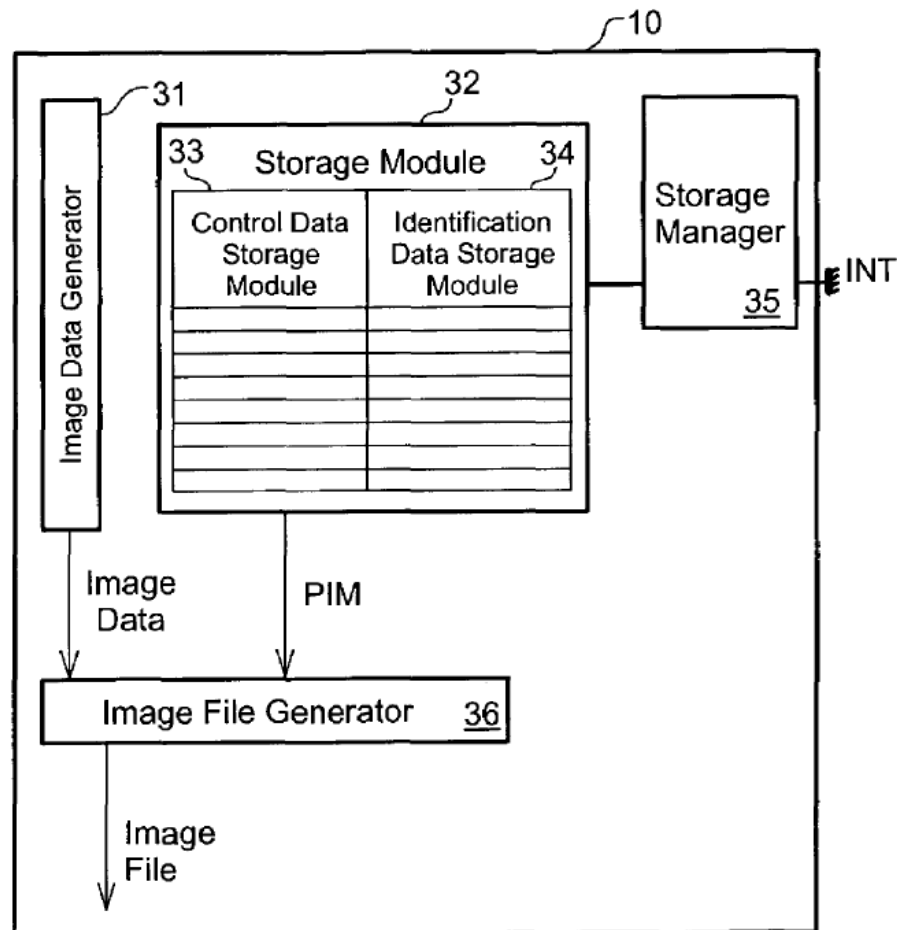
## II. THE '082 PATENT

The '082 patent claims improvements in processing digital image data to achieve desired visual characteristics. In particular, the '082 claimed inventions improve the way that image generators, such as digital cameras, (1) generate and store digital image-related data that includes image data and image processing control data, as well as specification data identifying the image processing mode and control data; and (2) update the control data in the system, for example, to implement new image processing modes that modify the image data in different ways. Ex. 1001, 1:44-2:9, 5:58-65, 6:28-30. Image processing control data may be, for example, a set of parameters used to control an image processing mode, e.g., “sunset.” *Id.*, 8:66-9:2, Fig. 7.

Instead of attaching the control data to the image data as in prior image generators, the claimed image generator includes a control data storage module that stores image processing control data, including specification data and control data, separate from the image data. *Id.*, 1:24-30. The '082 patent relates the image data to detached control data and thus facilitates updating that control data with new data corresponding to selected specification data. Compared to prior art systems, the methods and systems claimed by the '082 patent reduce the resources required to perform digital image data processing to achieve the user's desired

visual characteristics, and increase the functionality of image generators by providing new or improved image processing modes.

Figure 3 illustrates the structure of the image-related-data generator (the digital camera, e.g.):



Ex. 1001, Fig. 3.

The “control data storage module 33” stores the image processing control data, which are “PIMs” (Print Image Matching) in preferred embodiments. *Id.*, 7:27. The PIMs include “various information such as the following: gamma values

of the DSC [digital still camera] 10, setting parameters for contrast and color balance, and color space parameters that identifies the color space where the image data is defined.” *Id.*, 6:63-66. The PIMs may further include “various parameters related to the shooting condition: exposures, white balances, apertures, shutter speeds, and zoom settings.” *Id.*, 6:67-7:2.

Because the structure of the image-related-data generator allows PIMs to be “pre-stored in the DSC” (*id.*, 5:64), the image generating system allows storing the control data separate from the image data. Specifically, the “image file generator” acts as a relating module, relating image data and control data. *Id.*, 7:29-32. This structure improves upon prior systems that required the control data to be attached to the image data, because storing the control data separately facilitates updating that data.

More specifically, the illustrated “storage manager” “manages the PIMs stored in the control data storage module 33 by storing update data.” *Id.*, 7:34-35. The storage manager is responsible for retrieving update data when requested. *Id.*, 7:37-39. The storage manager therefore improves upon how a conventional image generator operates and handles image data and control data by updating specific control data in the control data storage module based on specification data that identifies that control data. The claimed modules provide specific improvements over prior image generators by creating a novel image-related-data generator

having a unique structure including a control data storage module, a relating module, and a storage manager that improves the manner in which image generators store and retrieve image data and control data.

Claim 1 of the '082 patent recites how to achieve these improvements by providing a new storage structure that separates the image processing control data from the image data, distributes control data updates to a storage module, and relates the image data to the image processing control data in a separate image file generator or “relating module.” Claim 1 recites:

1. An image related data generator, connectable to a server, comprising:
  - an image data generator configured to generate image data;
  - a control data storage module pre-storing image processing control data to control image processing of the image data;
  - a relating module configured to relate the image data to the image processing control data; and
  - a storage manager configured to update at least a part of the image processing control data stored in the control

data storage, based on specification data, which specifies the image processing control data to be updated, wherein the image processing control data is to be used in processing of the image data by an image processing device that receives the image data and the image processing control data that are transferred from the image related data generator.

The '082 patent describes a further embodiment in which a personal computer communicates with the update data server and acts as an image related data editor. *Id.*, 12:60-64. Claim 7, which is directed to the “image related data editor” embodiment, recites:

7. An image related data editor, connectable to a server, comprising:  
an input module configured to input image data and attribute data related to the image data, the attribute data including at least one of image processing control data to control image processing of the image data and identification data to identify the image processing control data;

an update data acquiring module configured to acquire update data of the image processing control data based on the attribute data from the server; and a relating module configured to relate the image data to the update data, wherein the image processing control data is to be used in processing of the image data by an image processing device that receives the image data and the image processing control data that are transferred from the image related data editor.

Claims 8 and 9 of the '082 patent are directed to the update data server, which provides the update data to the DSC in response to received specification data. Claim 8 recites:

8. An update data transmit apparatus, connectable to a predetermined peripheral device, comprising:  
an update data storage module for storing in advance update data for image processing control data to control image processing of image data, the update data being associated with at least one of the image processing

control data and identification data to identify the image processing control data;

an input module configured to input predetermined data from the peripheral device, the predetermined data including the image processing control data to be updated or the identification data; and

an update data transmission module configured to transmit the update data corresponding to the predetermined data to the peripheral device,

wherein the image processing control data is to be used in processing of the image data by an image processing device that receives the image data and the image processing control data that are transferred from the peripheral device.

Claim 9, the method version of claim 8, recites as follows:

9. A method for transmitting update data for image processing control data, which is used to control image processing of image data, to a peripheral device, the method comprising steps of:

providing the update data associated with at least one of the image processing control data and identification data to identify the image processing control data; inputting predetermined data from the peripheral device, the predetermined data including the image processing control data to be updated or the identification data corresponding to the image processing control data to be updated; and transmitting the update data corresponding to the predetermined data to the peripheral device.

Claim 10 of the '082 patent recites how to achieve the described improvements by providing a new storage structure that separates the image processing control data from the image data, distributes control data updates to a storage module, and relates the image data to the image processing control data in a separate image file generator or “relating module.” Claim 10 recites:

10. A digital camera for generating an image file including image data and image processing control data, the image processing control data being used for controlling image processing of the image data, the digital camera comprising:

an image data generating module configured to generate image data of an image captured by the digital camera; a display device;

a control data storage for storing in advance image processing control data to control image processing of the image data; and

an image file generating module configured to generate an image file that includes the image data and the image processing control data; and

a memory management module configured to acquire additional image processing control data from an external memory device separate from the digital camera, and to store the additional image processing control data into the control data storage,

wherein the image file generating module displays a user interface screen including a plurality of processing modes on the display device to enable a user to select one of the plurality of processing modes, and generates the image file using specific image processing control data associated with the selected processing mode, and

when the additional image processing control data has been stored in the control data storage, the image file generating module displays on the display device a plurality of processing modes which includes an additional processing mode related to the additional image processing control data.

### **III. CLAIM CONSTRUCTION**

No claim term requires express construction to deny institution. For purposes of this Preliminary Response, the claim terms should receive their ordinary and customary meaning in light of the specification and prosecution history, as understood by a person of ordinary skill in the art. 37 C.F.R. § 100(b); *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005).

### **IV. LEGAL STANDARD**

The Board may not institute an *inter partes* review unless the Petition demonstrates a reasonable likelihood that the Petition would prevail with respect to at least one of the claims challenged in the petition. 35 U.S.C. § 314(a).

### **V. LEVEL OF ORDINARY SKILL IN THE ART**

For purposes of this Preliminary Response only, Patent Owner does not dispute the level of skill for a person of ordinary skill in the art (“POSITA”), set forth in the Petition. Pet., 5. The level of skill in the art does not affect whether to

deny institution, because Petitioner and its expert do not address certain claim limitations and disclosures from the applied references. Patent Owner does not waive, however, any argument regarding the proper level of skill and reserves the right to later advance additional arguments.

**VI. THE PETITION DOES NOT ESTABLISH A REASONABLE LIKELIHOOD THAT THE ASSERTED REFERENCES RENDER UNPATENTABLE ANY CHALLENGED CLAIM.**

**A. The Petition does not establish a reasonable likelihood that Kuwata and Fisher render obvious claims 1-3, 5-6, or 10 (Ground 1).**

**1. Kuwata: Overview**

U.S. Pat. Appl. No. 2002/0030833 to Kuwata (“Kuwata”) is directed to processing image data to obtain an optimal output in view of a chosen output device, such as a printer. Ex. 1005, ¶ [0014]. Kuwata teaches an image file (“GF”) that contains image data (“GD”) and output control information (“CI”). *Id.*, ¶ [0066]. According to Kuwata, the output control information “specifies the image output conditions and image output status for an output device so as to be able to obtain the optimal image output results,” e.g., for a selected camera and printer. *Id.*, ¶ [0067]. Kuwata further describes storing the output control information CI with the image data GD in the image file GF at the time of shooting an image “by setting in advance any output conditions on DSC 22 before shooting.” *Id.*, ¶ [0082]. Alternatively, a user can “specify[] use of any desired output conditions

or use of preset conditions on DSC after shooting,” in which case the specified output conditions are added to the image file after the image data is generated. *Id.*

According to Kuwata, output conditions are “set by the user on [the] digital still camera.” *Id.*, ¶ [0082]. Kuwata provides several specific examples of output conditions, including “output conditions to match the output device that outputs the image data GD in an image file GF, output conditions optimized for each manufacturer of printer or for each equipment type of printer, or . . . general use output conditions that are used fairly often, such as bright, sharp, etc.” *Id.*, ¶ [0089]. Kuwata explains that “[t]his information (conditions) is set by a user selecting from choices prepared in advance, and there is no requirement for the user to make fine settings.” *Id.*

Thus, according to Kuwata, a user sets output conditions in advance, on the camera itself, according to choices presented to the user representing, e.g., particular camera/printer pairs. Kuwata further discloses output control information stored on the camera that describes output characteristics for multiple output devices, providing the flexibility to pair the camera and obtain optimal imaging results with multiple printers. *Id.*, ¶ [0075].

Although the user sets the output conditions on the camera, Kuwata explains that “DSC manufacturers are best suited to identify the optimal processing settings by observing the results of the DSC when used with a particular printer.” *Id.*,

¶ [0075]. According to Kuwata, “[t]his identification of what combination of DSC parameters and printer parameters is largely found through a trial and error process” performed by the DSC manufacturer. *Id.* In particular, an advantage of providing output device-specific control information in the image file on the DSC is that “the DSC manufacturer goes through the laborious process of identifying the optimum combination of operational characteristics of a DSC-printer pair, and memorizes the characteristics in memory, for later retrieval when the photographer identifies the target printer to be used for printing.” *Id.*, ¶ [0077]. Kuwata further explains that “the DSC vendor does the matching once, so thousands of DSC photographers never have to do it, yet the photographers can be guaranteed that the results will be optimal for the DSC-printer pair.” *Id.*

Unlike the ’082 patent, therefore, Kuwata discloses a self-contained camera system that does not connect to the internet or download information from any kind of central server; neither “server” nor “internet” appears anywhere in Kuwata’s disclosure. Further, although Kuwata describes “control information CI” that can be combined with “image data GD” and used for image processing, Kuwata nowhere discloses downloading or obtaining the control information from an external source or, importantly, updating that information. To the contrary, Kuwata describes a self-contained system in which a camera is optimally paired with multiple output devices based on the camera manufacturer’s trial-and-error

testing. Kuwata does not disclose updating image processing control information at all, let alone doing so based on specification data.

## **2. Fisher: Overview**

U.S. Pat. Appl. No. 2001/0025303 to Fisher (“Fisher”) is directed to storing and using so-called “ancillary” data files for an electronic camera device to implement more efficient methods for accessing and utilizing information. Ex. 1006, ¶ [0008]. According to Fisher, managing information on electronic devices may “create substantial challenges for system designers,” as “demands for increased device functionality and performance may require more system processing power and require additional hardware resources.” *Id.*, ¶ [0005]. Fisher notes that digital imaging devices in particular “may benefit from an efficient implementation because of the large amount and complexity of the digital data involved.” *Id.*, ¶ [0006].

To address these memory and scalability limits, Fisher teaches downloading ancillary data files from the internet or other data source, which are stored in a memory area on the camera following download. Ex. 1006, ¶ [0031]. According to Fisher, these ancillary data files may contain “any appropriate information, data, or instructions to facilitate successful operation of camera device,” and in particular may include “various types of information for combining with image data that is

captured by camera device 110 to thereby produce composite images.” *Id.*,

¶ [0034].

Unlike the ’082 patent, therefore, which is directed to particular structures on both the DSC side and server side that improve on prior systems that required control data to be attached to image data, Fisher describes a general client/server relationship in which generic “ancillary data files” are stored at a server and downloaded by a camera or similar device only as needed, so as to reduce memory requirements and improve scalability.

**3. The Petition fails to show that Kuwata and Fisher render obvious all limitations of any challenged claim.**

- a. Claim 1: The Petition does not show that Kuwata in view of Fisher renders obvious claim element [1d]: “a storage manager configured to update at least a part of the image processing control data stored in the control data storage, based on specification data, which specifies the image processing control data to be updated.”**

The Petition fails to show that Kuwata in view of Fisher discloses “a storage manager configured to update at least a part of the image processing control data stored in the control data storage, based on specification data, which specifies the image processing control data to be updated.”

The Petition concedes that Kuwata does not disclose or suggest updating image processing control data based on specification data, relying on Fisher to

supply these teachings. Pet., 22-23. In particular, Petitioner contends that Fisher’s ancillary data module discloses the claimed “storage manager”; that Fisher’s ancillary data files disclose the claimed “image processing control data”; and that Fisher’s camera memory discloses “control data storage.” Pet., 23. But Petitioner fails to show that Fisher’s ancillary data files contain “image processing control data,” and Petitioner therefore fails to meet its burden to show that Kuwata in view of Fisher discloses this claim element.

Petitioner fails to show that Fisher discloses image processing control data. Fisher provides examples of data stored in its ancillary data files, including “image template files, text overlay files, image background files, and special program instruction files.” Ex. 1006, ¶ [0023]. Fisher describes ancillary data files including “various types of information for combination with image data that is captured by camera device 110 to thereby produce composite images,” including “one or more template files (such as still templates, animated templates, voice-annotated templates) that may be utilized as a setting or a framework for presenting one or more images captured by camera device,” or other visual data such as “text overlay files” and “background files that include visual background data.” *Id.*, ¶ [0050]. But the Petition cites no evidence suggesting that Fisher’s ancillary data files store image processing control data.

“Image processing control data,” as claimed, is data used “to control image processing of the image data.” Ex. 1001, 15:11-13. Indeed, the ’082 patent describes image processing control data as a distinct type of data that is different than Fisher’s templates, overlays, backgrounds, and even unspecified “special program instruction files.” For example, the ’082 patent describes image processing control data as containing a non-limiting set of parameters specific to image processing, including gamma correction, color space, contrast and color balance. *Id.*, Fig. 7, 5:46-65; 9:4-10. As further described in the ’082 patent, image processing control data is attached to—and therefore distinct from—image data, and used to “control[] image processing.” *Id.*, 1:24-28.

Petitioner nowhere explains or cites evidence showing that Fisher’s ancillary data files are “image processing control data”; in particular, Petitioner fails to explain how Fisher’s ancillary data files “control image processing.” Because Petitioner fails to establish that Fisher’s ancillary data files contain “image processing control data” as claimed, Petitioner fails to meet its burden to show that Fisher supplies the missing teachings of Kuwata with regard to the claim limitation “a storage manager configured to update at least a part of the image processing control data stored in the control data storage.”

Moreover, the Petition’s suggestion that a POSITA would have been motivated to combine Kuwata with Fisher to “download new or updated preset

conditions for a DSC-printer pair” from a server overlooks key teachings in Kuwata that suggest the opposite. Pet., 24. The Petition alleges that a POSITA would have been motivated, in view of Fisher, to add new features to Kuwata’s camera. Pet. 26. But Petitioner fails to address express disclosures in Kuwata that teach away from adding new features to the camera and instead emphasize storing all available information about DSC/printer pairs directly on the camera. Petitioner therefore fails to meet its burden to show that a POSITA would have been motivated to combine Kuwata and Fisher to arrive at this claim element.

In particular, as taught by Kuwata, “the DSC manufacturer goes through the laborious process of identifying the optimum combination of operational characteristics of a DSC-printer pair,” and stores those characteristics in memory so that they can be retrieved later by the photographer. Ex. 1005, ¶ [0077]. As Kuwata explains, “the DSC vendor does the matching once, so thousands of DSC photographers never have to do it.” *Id.* Kuwata further teaches storing output control information for multiple devices on the camera so that the user does not have to identify or obtain control information for new DSC/printer pairs. *Id.*, ¶ [0075].

Fisher’s teachings point in precisely the opposite direction. Unlike Kuwata, which is concerned with ease of use for the camera user without regard for the amount of data stored on the imaging device, Fisher is concerned with memory

management and scalability of hardware devices. Ex. 1006, ¶ [0005]. Fisher teaches storing ancillary data at an external server, off the imaging device, for search and download by the user. *Id.*, ¶ [0031]. Fisher’s teachings are therefore antithetical to Kuwata’s teachings of loading the camera in advance with as much information about camera/printer pairs as possible. The Petition does not address Kuwata’s teachings regarding a self-contained camera system for which the DSC manufacturer—rather than the user—performs the labor-intensive process of identifying various camera/printer mappings and storing those on the camera in advance, so that no work is required by the user to obtain new camera/printer pairings. Thus, the Petition fails to show that a POSITA would have been motivated to implement Fisher’s teachings in Kuwata. In overlooking these express teachings of Kuwata and their incompatibility with Fisher, the Petitioner fails to meet its burden in establishing a motivation to combine these two references.

In sum, given that Fisher does not teach the claimed “image processing control data,” and given the further incompatibilities between Kuwata and Fisher, the Petition fails to show that a POSITA would have been motivated to combine Kuwata with Fisher to arrive at this claim limitation. The Petition therefore fails to establish a reasonable likelihood that claim 1 is obvious in view of Kuwata and Fisher.

- b. Claim 10: The Petition does not show that Kuwata in view of Fisher renders obvious claim element [10e]: “a memory management module configured to acquire additional image processing control data from an external memory device separate from the digital camera, and to store the additional image processing control data into the control data storage.”**

The Petition fails to show that Kuwata in view of Fisher discloses “a memory management module configured to acquire additional image processing control data from an external memory device separate from the digital camera, and to store the additional image processing control data into the control data storage,” for the same reasons described at § VI.A.3.a regarding claim element [1d]. While the Petition notes that this claim element uses some different terminology from [1d], including recitation of “an external memory device separate from the digital camera,” it describes [1d] and [10e] as reciting “substantially similar limitations” and cites back to [1d] in alleging that a POSITA would have found this claim element obvious in view of Kuwata and Fisher. Pet., 46.

As discussed at § VI.A.3.a, however, Fisher fails to cure the deficiencies of Kuwata with regard to claim element [1d], and therefore fails to cure the deficiencies of Kuwata with regard to this claim element as well. In particular, Fisher does not teach “image processing control data” as claimed, and Fisher therefore cannot cure Kuwata’s deficiency with regard to a memory management module “configured to acquire additional image processing control data from an

external memory device separate from the digital camera.” Further, Petitioner fails to meet its burden to show that a POSITA would have found it obvious in view of Kuwata and Fisher “to acquire additional preset conditions corresponding to different DSC-printer pairs or new modes,” as described at § VI.A.3.a, *supra*. Because Fisher does not remedy the shortcomings of Kuwata, the combination of Kuwata and Fisher fails to teach this claim element, and the Petition therefore fails to establish a reasonable likelihood that claim 10 is obvious in view of Kuwata and Fisher.

**c. Claims 2-3, 5-6**

Each of claims 2, 3, 5, and 6 depends from independent claim 1. The Petition therefore fails on dependent claims 2, 3, 5, and 6 for at least the same reasons as claim 1, as discussed in § VI.A.3.a.

**B. The Petition does not establish a reasonable likelihood that Kuwata, Fisher, and Ohga render obvious claims 1-6 or 10 (Ground 2).**

**1. Ohga: Overview**

U.S. Patent No. 6,788,305 to Ohga (“Ohga”) is concerned with color matching between an image and a display monitor in a network environment. Ex. 1007, 1:43-45. In particular, Ohga describes client PCs connected to a network that includes a web server storing an HTML document. The HTML document contains a link to both image data and an input profile. *Id.*, 3:36-46. The HTML

document may also contain a link to a color matching module (CMM) program for matching colors between the image data and a desired output source such as a particular monitor connected to the computer. *Id.*, 3:22-28.

According to Ohga, the user manually selects an output profile for the monitor; Ohga describes various methods by which the monitor profile may be obtained by the PC user. *Id.*, 3:51-4:2.

Once the monitor profile is obtained, both the input and output profiles are passed to the CMM program, which executes color matching for the image data based on the profiles. *Id.*, 3:48-4:5.

Unlike the '082 patent, therefore, Ohga's system requires the user to manually obtain a monitor output profile prior to processing of the image data by the CMM. Further, Ohga's CMM must take as inputs both the input profile and the output profile before it can process the image data, and the output profile must be selected and passed in manually by the user prior to image processing.

**2. The Petition fails to show that Kuwata, Fisher, and Ohga render obvious all limitations of any challenged claim.**

- a. Claim 1: The Petition does not show that Kuwata in view of Fisher and Ohga discloses “a storage manager configured to update at least a part of the image processing control data stored in the control data storage, based on specification data, which specifies the image processing control data to be updated.”**

The Petition fails to show that Kuwata in view of Fisher and Ohga discloses “a storage manager configured to update at least a part of the image processing control data stored in the control data storage, based on specification data, which specifies the image processing control data to be updated.”

The Petition fails to show that Kuwata in view of Fisher discloses “a storage manager configured to update at least a part of the image processing control data stored in the control data storage,” as addressed at § VI.A.3.a above. And the Petition does not argue that Ohga discloses updating image processing control information. Petitioner relies on Ohga here only as allegedly disclosing “based on specification data, which specifies the image processing control data to be updated.” Pet., 56. Because Petitioner fails to show that Ohga supplies the teaching that is missing from the combination of Kuwata and Fisher, the Petition fails to show that Kuwata in view of Fisher and Ohga discloses this limitation.

Moreover, while Petitioner relies on Ohga as allegedly disclosing “based on specification data, which specifies the image processing control data to be

updated,” Petitioner fails to show that Ohga supplies this teaching. First, Petitioner points to two separate data structures in Ohga as alleged “specification data.”

Petitioner first points to a “designation” of an input profile as “specification data for [the] input profile.” Pet., 56. Petitioner then points to a “given profile name” of an output profile as “specification data for [the] output profile.” *Id.* According to the Petition, then, Ohga’s alleged “specification data” specifies input or output profiles.

But the Petition overlooks the complete claim term, which requires not mere “specification data” but “specification data, which specifies the image processing control data to be updated.” Ex. 1001, 15:18-19. Specification data must specify image processing control data. Ohga’s purported “specification data” specifies input and output profiles, but neither Petitioner nor its expert explains how or why these “profiles” disclose image processing control data as claimed. Further, Ohga itself does not provide evidence showing that the profiles provide image processing control data. Ohga explains only that the input profile “is passed as a parameter to the CMM program,” that the obtained output profile is also “passed to the CMM program,” and that the CMM program “executes color matching for the image data J1 on the basis of the input profile P1 and monitor profile.” Ex. 1007, 3:38-41, 3:48-50, 4:3-5. Ohga provides no further information about what kinds of data the profiles contain or how that data is used as part of the CMM program.

The Petition cites no evidence suggesting that the profiles themselves constitute image processing control data, and Ohga itself does not describe the profiles as such. The Petition therefore fails to show that information specifying the profiles is “specification data” that “specifies the image processing control data to be updated,” as claimed. Thus, the Petition fails to show that Kuwata in view of Fisher and Ohga renders obvious “a storage manager configured to update at least a part of the image processing control data stored in the control data storage, based on specification data, which specifies the image processing control data to be updated,” and therefore fails to establish a reasonable likelihood that claim 1 is obvious in view of Kuwata, Fisher, and Ohga.

- b. Claim 10: The Petition does not show that Kuwata in view of Fisher and Ohga renders obvious “a memory management module configured to acquire additional image processing control data from an external memory device separate from the digital camera, and to store the additional image processing control data into the control data storage.”**

The Petition fails to show that Kuwata in view of Fisher and Ohga discloses “a memory management module configured to acquire additional image processing control data from an external memory device separate from the digital camera, and to store the additional image processing control data into the control data storage,” for the reasons discussed at §§ VI.A.3.b. and VI.B.2.a above.

The Petition does not provide substantive analysis for this claim limitation, instead merely stating that “Kuwata, Fisher, and Ohga render obvious [10e] for the reasons explained” for Ground 2, [1d]. Pet., 63. But Kuwata, Fisher, and Ohga fail to render [1d] obvious, as described at § VI.B.2.a. The Petition then alleges that a POSITA would have found it obvious to combine the references to acquire “additional preset conditions for a DSC-printer pair” from “a server.” Pet., 64. But the Petition provides no further explanation for this conclusory statement, instead simply citing back to its discussion of [10e] for Ground 1 and [1b] for Ground 2. *Id.* The Petition failed to carry its burden on those limitations, for the reasons described at §§ VI.A.3.b. and VI.B.2.a. As the Petition does not point to any further justification for combining the references, it therefore fails to establish a reasonable likelihood that this claim is obvious in view of Kuwata, Fisher, and Ohga.

**c. Claims 2-6**

Each of claims 2-6 depends from independent claim 1. The Petition therefore fails on dependent claims 2-6 for at least the same reasons as claim 1, as discussed in § VI.B.2.a.

- C. The Petition does not establish a reasonable likelihood that Kuwata in view of Ohga renders obvious claim 7 (Ground 3) because the Petition does not show that Kuwata in view of Ohga discloses claim element [7b]: “an update data acquiring module configured to acquire update data of the image processing control data based on the attribute data from the server.”**

The Petition fails to show that Kuwata in view of Ohga discloses “an update data acquiring module configured to acquire update data of the image processing control data based on the attribute data from the server,” for reasons discussed at § VI.B.2.a above. Petitioner relies on Ohga’s teachings for the “update data” and “attribute data” limitations, acknowledging that Kuwata does not disclose them. Pet., 71. But Petitioner fails to show that Ohga discloses either of these limitations, and therefore fails to show that Kuwata in view of Ohga teaches this claim element.

In particular, the Petition identifies “a profile for the input and output devices” as “update data of the image processing control data.” Pet., 71. As discussed at § VI.B.2.a, however, the Petition fails to show that Ohga’s input and output profiles are “image processing control data.” The Petition therefore likewise fails to show that Ohga’s input and output profiles are the claimed “update data” of “image processing control data,” as the “update data” must be updated image processing control data.

The Petition also identifies “the devices’ names” as the claimed “attribute data,” but this mapping is likewise unsupported. The Petition improperly reads “attribute data” in isolation, untethered to the rest of the claim. As recited at claim element [7b], the claimed “attribute data” is “attribute data related to the image data, the attribute data including at least one of image processing control data to control image processing of the image data and identification data to identify the image processing control data.” Ex. 1001, 15:49-54. Any “attribute data” must therefore include “at least one of image processing control data to control image processing of the image data and identification data to identify the image processing control data.”

But Petitioner does not explain why the “devices’ names” (which Petitioner identifies as “attribute data”) are “image processing control data” or “identification data to identify the image processing control data.” The Petition fails to explain how the names themselves would be image processing control data, and—as discussed at § VI.B.2.a—the Petition fails to show that the profiles described by those names disclose image processing control data.

Because Petitioner fails to show that Ohga teaches the claimed “update data” or “attribute data,” and because Petitioner concedes that these claim limitations are missing from Kuwata, Petitioner likewise fails to show that the combination of Kuwata and Ohga teaches this claim element. The Petition therefore fails to

establish a reasonable likelihood that claim 7 is obvious in view of Kuwata combined with Ohga.

**D. The Petition does not establish a reasonable likelihood that Ohga in view of Kuwata renders obvious claim 8 (Ground 4).**

**1. The Petition does not show that Ohga in view of Kuwata renders obvious claim element [8a]: “an update data storage module for storing in advance update data for image processing control data to control image processing of image data, the update data being associated with at least one of the image processing control data and identification data to identify the image processing control data.”**

The Petition fails to show that Ohga in view of Kuwata discloses “an update data storage module for storing in advance update data for image processing control data to control image processing of image data, the update data being associated with at least one of the image processing control data and identification data to identify the image processing control data.” In particular, the Petition fails to show that Ohga discloses “update data” or “identification data.”

The Petition first identifies “profiles P1, P2 associated with input and output devices, respectively” as “update data for image processing control data.” Pet., 74. For the same reasons as discussed at § VI.C, however, the Petition fails to show that Ohga’s input and output profiles are update data for “image processing control data,” as the claim requires. The Petition’s read for “identification data” is likewise unsupported. The Petition points to the “names of the devices” in Ohga as

disclosing that claim limitation. Pet., 74. But the Petition improperly reads “identification data” in isolation, untethered to the rest of the claim. “Identification data,” as claimed, must “identify the image processing control data.” For the same reasons as described at § VI.C for “attribute data,” the Petition fails to explain how the names of the devices identify *image processing control data*.

Thus, the Petition fails to show that Ohga in view of Kuwata teaches the claimed “update data” and “identification data.”

**2. The Petition does not show that Ohga in view of Kuwata renders obvious claim element [8b]: “an input module configured to input predetermined data from the peripheral device, the predetermined data including the image processing control data to be updated or the identification data.”**

The Petition also fails to show that Ohga in view of Kuwata renders obvious “an input module configured to input predetermined data from the peripheral device, the predetermined data including the image processing control data to be updated or the identification data.” First, the Petition does not point to any disclosure in Ohga as teaching “the predetermined data including the image processing control data to be updated.” Instead, the Petition focuses on the alternative scenario in the claim, in which “predetermined data” includes “the identification data.” More specifically, the Petition points to “data identifying the output profile” as “identification data.” Pet., 75. But the Petition fails to show that

“data identifying the output profile” is “identification data” as claimed, for the same reasons discussed at § VI.D.1.

Because the Petition does not allege that Ohga teaches “the predetermined data including the image processing control data to be updated,” and because the Petition fails to show that Ohga teaches “identification data” as claimed, the Petition fails to show that Ohga in view of Kuwata teaches this claim element.

**3. The Petition does not show that Ohga in view of Kuwata renders obvious claim element [8c]: “an update data transmission module configured to transmit the update data corresponding to the predetermined data to the peripheral device.”**

The Petition likewise fails to show that Ohga in view of Kuwata renders obvious “an update data transmission module configured to transmit the update data corresponding to the predetermined data to the peripheral device.” The claimed “update data” must be “update data of the image processing control data,” as recited in claim element [8a]. The Petition points to “profiles P1, P2 associated with input and output devices” as the “update data of the image processing control data.” Pet., 76. For the same reasons as discussed at §§ VI.C and VI.D.1, however, the Petition fails to show that Ohga’s input and output profiles are update data for “image processing control data,” as the claim requires. Because Petitioner fails to show that Ohga teaches “update data of the image processing control data,” it likewise fails to show that Ohga teaches “an update data transmission module

configured to transmit the update data.” The Petition therefore fails to show that Ohga in view of Kuwata teaches this claim element.

- 4. The Petition does not show that Ohga in view of Kuwata renders obvious claim element [8d]: “wherein the image processing control data is to be used in processing of the image data by an image processing device that receives the image data and the image processing control data that are transferred from the peripheral device.”**

Finally, the Petition fails to show that Ohga in view of Kuwata discloses “wherein the image processing control data is to be used in processing of the image data by an image processing device that receives the image data and the image processing control data that are transferred from the peripheral device,” at least because the Petition fails to show that Ohga’s “input and output profiles”—which the Petition identifies as “image processing control data” (Pet., 77)—disclose image processing control data as claimed, for the reasons discussed at § VI.B.2.a. The Petition therefore fails to show that Ohga teaches this claim element. As the Petition fails to show that Ohga discloses claim elements [8a], [8b], [8c], and [8d], the Petition fails to establish a reasonable likelihood that claim 8 is obvious in view of Ohga combined with Kuwata.

**E. The Petition does not establish a reasonable likelihood that Ohga anticipates (Ground 5) or renders obvious (Ground 6) claim 9.**

**1. The Petition does not show that Ohga teaches or suggests claim element [9a]: “providing the update data associated with at least one of the image processing control data and identification data to identify the image processing control data.”**

The Petition also fails to show that Ohga teaches or suggests “providing the update data associated with at least one of the image processing control data and identification data to identify the image processing control data,” for the same reasons discussed at § VI.D.1 above. In particular, the Petition fails to show that Ohga teaches the claimed “update data” or “identification data,” as described at § VI.D.1.

**2. The Petition does not show that Ohga teaches or suggests claim element [9b]: “inputting predetermined data from the peripheral device, the predetermined data including the image processing control data to be updated or the identification data corresponding to the image processing control data to be updated.”**

The Petition also fails to show that Ohga teaches or suggests “inputting predetermined data from the peripheral device, the predetermined data including the image processing control data to be updated or the identification data corresponding to the image processing control data to be updated,” for the same reasons discussed at § VI.D.2 above. In particular, the Petition fails to show that Ohga teaches the claimed “identification data,” as described at § VI.D.2.

**3. The Petition does not show that Ohga teaches or suggests claim element [9c]: “transmitting the update data corresponding to the predetermined data to the peripheral device.”**

The Petition fails to show that Ohga teaches or suggests “providing the update data associated with at least one of the image processing control data and identification data to identify the image processing control data,” for the same reasons discussed at § VI.D.3 above. In particular, the Petition fails to show that Ohga teaches the claimed “update data,” as described at § VI.D.3.

As the Petition fails to show that Ohga teaches any of claim elements [9a], [9b], and [9c], the Petition fails to establish a reasonable likelihood that Ohga anticipates or renders obvious claim 9.

## **VII. CONCLUSION**

The Petition does not establish a reasonable likelihood that any of the challenged claims are unpatentable. The Board should deny institution.

IPR2024-00959  
U.S. Patent No. 7,428,082

Date: October 10, 2024

Respectfully submitted,

s/ Cyrus A. Morton

Cyrus A. Morton (Reg. No. 44,954)  
CMorton@RobinsKaplan.com

*Lead Counsel*

Samuel J. LaRoque (Reg. No. 68,542)  
SLaRoque@RobinsKaplan.com

*Back-Up Counsel*

Robins Kaplan LLP  
800 LaSalle Avenue, Suite 2800  
Minneapolis, MN 55402  
Direct Line: 612-349-8722  
Fax: 612-339-4181

Attorneys for Patent Owner

**CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITATION**

I certify that this Patent Owner's Preliminary Response complies with the word count limit and contains 7,273 words in 14-point Times New Roman font as calculated by the word count feature of Microsoft Office, in compliance with 37 C.F.R. § 42.24(a)(1)(i). This word count is inclusive of all text and footnotes but does not include the table of contents, table of authorities, certificate of service or word count, or appendix of exhibits or claim listing.

Date: October 10, 2024

Respectfully submitted,

*s/ Cyrus A. Morton*

Cyrus A. Morton (Reg. No. 44,954)

CMorton@RobinsKaplan.com

*Lead Counsel*

Samuel J. LaRoque (Reg. No. 68,542)

SLaRoque@RobinsKaplan.com

*Back-Up Counsel*

Robins Kaplan LLP

800 LaSalle Avenue, Suite 2800

Minneapolis, MN 55402

Direct Line: 612-349-8722

Fax: 612-339-4181

Attorneys for Patent Owner

**CERTIFICATE OF SERVICE**

I certify that on October 10, 2024, a copy of Patent Owner's Preliminary Response, including exhibits, was served in its entirety by electronic mail to Petitioner's counsel at the following addresses indicated in Petitioner's Mandatory Notices:

**Counsel for Google LLC**

Erika H. Arner  
erika.arner@finnegan.com

Daniel C. Cooley  
daniel.cooley@finnegan.com

Kevin D. Rodkey  
kevin.rodkey@finnegan.com

Robert K. High  
robert.high@finnegan.com

Safiya Aguilar  
safiya.aguilar@finnegan.com

A. Grace Mills  
gracie.mills@finnegan.com

Alissa E. Green  
alissa.green@finnegan.com

IPR2024-00959  
U.S. Patent No. 7,428,082

Date: October 10, 2024

Respectfully submitted,

s/ Cyrus A. Morton

Cyrus A. Morton (Reg. No. 44,954)  
CMorton@RobinsKaplan.com

*Lead Counsel*

Samuel J. LaRoque (Reg. No. 68,542)  
SLaRoque@RobinsKaplan.com

*Back-Up Counsel*

Robins Kaplan LLP  
800 LaSalle Avenue, Suite 2800  
Minneapolis, MN 55402  
Direct Line: 612-349-8722  
Fax: 612-339-4181

Attorneys for Patent Owner