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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LEXMARK INTERNATIONAL, INC.,

Petitioner,

v.

FLEXIWORLD TECHNOLOGIES, INC.,

Patent Owner.

Case IPR2023-00845

U.S. Patent No. 7,609,402

PATENT OWNER'S PRELIMINARY RESPONSE

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EXHIBIT LIST

Exhibit	Description
2001	Flexiworld website homepage
2002	Article from Portland Business Journal, dated April 5, 2002
2003	Article from Portland Business Journal, dated April 20, 2003

Pursuant to 35 U.S.C. § 313 and 37 C.F.R. § 42.107, Patent Owner Flexiworld Technologies, Inc. (“Flexiworld” or “Patent Owner”) hereby submits this Preliminary Response to Petitioner Lexmark International, Inc.’s (“Lexmark” or “Petitioner”) Petition for *Inter Partes* Review, challenging claims 1-21 and 23-37 of U.S. Patent No. 7,609,402 (the “’402 Patent”). As detailed more fully below, the Board should deny institution because Petitioner has failed to demonstrate a reasonable likelihood that it will prevail on any challenged claim.

I. INTRODUCTION

A. Flexiworld Technologies, Inc.

Flexiworld was founded in 2000 and is a pioneer and a leading innovator in the field of pervasive wireless technologies. *See* Ex. 2001. Flexiworld was voted the best early stage company in the Pacific Northwest in 2002. *See* Ex. 2002. Its business plan was voted as the top 2 among the “Ten Best” in 2002 and 2003 by the Silicon Valley Business Journal. *See id.*; *see also* Ex. 2003. To date, Flexiworld has been granted over 80 United States patents and over 94 patents worldwide on its inventions. Flexiworld’s patent portfolio has been forward cited thousands of times by major technology companies.

B. Summary of Preliminary Response

The Petition is flawed on the merits and does not warrant institution. Each of Petitioner’s grounds relies on a combination of U.S. Patent No. 7,355,732

(“Yamaguchi”) and U.S. Patent No. 6,950,645 (“Kammer”) with one or more other references. But, the combination of those two references fails to disclose or suggest certain elements of the challenged claims.

As discussed in more detail below, Yamaguchi discloses a coin-operated printing system where the user inserts coins in a coin rack of an interface box associated with a particular printer to pay for printing a document at that printer that is wire connected to the interface box. After the user inserts the coins, the printing system displays a random number on an LED display and only then the printing system establishes an RF connection with the user’s wireless device. Thereafter, the user inputs the previously displayed random number on his or her wireless device for authorizing access to the printing system to print a document at the printer 106. In other words, the user selects which printing device to use by inserting coins into the coin rack of that printing system, and only then, a wireless connection is established between the user’s wireless device and the selected printing system. The user does not (and the user’s wireless device does not) know anything about the properties of the printing system before making that selection (*i.e.*, inserting coins).

In contrast, the challenged claims of the ‘402 Patent recite a system in which the user’s device wirelessly discovers available output device(s) (*e.g.*, printer(s)), wirelessly receives attribute(s) of those device(s), and then selects an output device

based on the wirelessly received attribute(s). This wireless discovery process and the wireless receiving of attribute of each wirelessly device found in the search allows the user's device to obtain information about various available devices before making a selection, from among the one or more discovered wireless devices, based on the wirelessly received attributes. The '402 Patent does not require any coin insertion into the coin rack for selecting a printer. The '402 Patent also does not suffer from the limitation of requiring coin insertion into the coin rack to begin establishing a wireless connection between the user's wireless device and the interface box of the printer.

Petitioner tacitly acknowledges this shortcoming of Yamaguchi, instead citing to Bluetooth-related disclosures from Kammer that it proposes to combine with Yamaguchi. This, however, presents an additional complication. Namely, a POSITA would not have been motivated to take Yamaguchi's coin-insertion, random-number-input driven process and replace it with Kammer's Bluetooth discovery process. Petitioner cites Kammer's disclosure of receiving a device's "user-friendly name" to allow the user to select the device for connection. There is no need for such a process in Yamaguchi's system, where the user has already selected the desired device by inserting coin(s), and the user merely needs to input the random number on the device's LCD display to connect to it. Neither the

Petition nor Petitioner's expert offers any explanation for this nonsensical modification of Yamaguchi.

Petitioner compounds its errors by ignoring the challenged claims' requirements that the method/system conform or generate the content into output data using (or "relating at least in part to") the "attribute" received during the discovery process. Petitioner alleges that Kammer's disclosure of receiving an address or user-friendly name of the device is the claimed attribute but does not identify how either of those can be used to conform content into output data in Yamaguchi or Kammer. Instead, Petitioner relies on a third reference's disclosure of a printer profile, completely unconnected to the remainder of its analysis. This inconsistency is fatal to Petitioner's theories.

Moreover, Petitioner's proposed combinations with Moore and Kemp present additional flaws, in that Yamaguchi teaches away from its combination with Moore, and Kemp's system functions differently than Petitioner's description. These flaws further doom Petitioner's grounds.

Given these fatal flaws in each ground presented in the Petition, the Board should deny institution.

II. THE '402 PATENT AND THE CHALLENGED CLAIMS

A. Technology Background and Overview of '402 Patent

The '402 Patent generally relates to digital output of information from one electronic device (*e.g.*, a pervasive device such as a smart phone, tablet, camera, etc., which are referred to in the '402 Patent as “information apparatuses”) to an output device, such as a printer, speaker, controller wire-connected to a television, or television. *See, e.g.*, Ex. 1001, Abstract, 1:22-39. As the '402 Patent describes, at the time, the inventors realized that “ever-increasing bandwidth, processing power, wireless mobile devices, and wireless software applications” was leading to an explosion in the amount of digital content users were creating and accessing through such mobile devices. *See id.*, 1:50-54. The inventors realized that, because of the limitations of mobile devices at the time (*e.g.*, because of their relatively small display sizes, limited memory and processing power), users would prefer to be able to conveniently output information they created or retrieved on their mobile devices to an output device anywhere (*e.g.*, by outputting emails, maps, driving directions, or pictures to any output device anywhere). *See id.*, 1:54-2:7, 3:26-44.

Conventionally, in order for devices to be able to output data to output devices, users had to install a device-specific driver and/or other software associated with a specific output device in order to enable communication between

the user's device and the specific output device. *See id.*, 2:8-31. This device-specific driver installation for each output device not only took time (which could be cumbersome in certain settings, *e.g.*, when a user wants to quickly print something at an airport), but also could be difficult for unsophisticated users. *See id.*, 2:44-3:25.

B. The '402 Patent

To address the shortcomings of these prior solutions, the inventors of the '402 Patent developed a method of outputting digital information to output devices that did not require users to install and use device-specific drivers for each output device. *See, e.g., id.*, 5:29-35. In some such methods, the user's information apparatus performs at least part of the processing of the data into "intermediate output data" (for example, by performing raster image processing for outputting data to a printer for printing), and then providing the intermediate output data to the output device for further processing and output. *See, e.g., id.*, 6:4-56. In addition, the '402 Patent also describes processes in which the user's information apparatus wirelessly connects to the output device, obtains information about the output device, and uses that information to generate intermediate output data. *See, e.g., id.*, 14:19-15:58 (describing exemplary client application software capabilities), 30:5-31:50 (describing wireless device discovery processes), 33:10-35:49 (describing exemplary processes for obtaining information from the output device

to use in conforming data into intermediate output data); *see also id.*, 9:47-10:36 (describing exemplary aspects of output device profiles).

C. Challenged Claims

The '402 Patent has 37 claims, all but one of which (dependent claim 22) are challenged in the Petition. Independent claim 13 (one of the lead claims in the Petition) is shown below, with provisions relevant to the arguments herein underlined.

13. A method of mobile wireless data output from an information apparatus with access to at least part of a content to a wireless output device by short range wireless communication, wherein the information apparatus includes at least one wireless communication unit and is a distinct device from the output device, the method comprising:

opening a wireless communication channel;

discovering wirelessly one or more wireless devices that are available for wireless connection;

receiving over the wireless communication channel an attribute corresponding to each discovered wireless device, the attribute including one or more of a name, a device type, a device address, and an indication of a supported output device profile;

selecting a wireless output device from among the one or more discovered wireless devices based at least in part on the received attribute;

obtaining a security key at the information apparatus, the security key enabling wireless data transfer to the selected output device;

sending a security code related at least partly to the security key over the wireless communication channel and requesting the selected wireless output device to open a wireless connection channel for data transfer;

receiving over the wireless communication channel a response related to an authentication; and

if the received response is positive,

establishing a wireless connection channel between the information apparatus and the selected wireless output device,

conforming, at the information apparatus, at least part of the content into an output data encoded with at least one format, the conforming relating at least in part to the attribute received over the wireless communication channel, and transferring the output

data from the information apparatus to the selected output device
over said wireless connection channel for rendering,

receiving at the selected output device the output data,
performing at the selected output device at least one decoding
operations on said output data, and converting the output data into
an output engine data acceptable for rendering by an output engine
included in the selected output device.

In addition, the other independent claims (claims 1, 9, 23, 28, and 33) have substantially identical “receiving” and “conforming” (or “generating”) limitations.

III. CLAIM CONSTRUCTION

Petitioner alleges that it “does not believe construction of any term is necessary” in this proceeding. Pet. at 18. For purposes of this preliminary response (and without waiver of any such arguments), Patent Owner agrees that construction of claim terms is not necessary at this time.

IV. PETITIONER HAS NOT ESTABLISHED A REASONABLE LIKELIHOOD OF PROVING ANY CHALLENGED CLAIM IS UNPATENTABLE.

Petitioner has not carried its burden of showing a reasonable likelihood that any of the challenged claims are unpatentable. Petitioner’s four grounds consist entirely of multi-reference obviousness combinations based on at least Yamaguchi and Kammer. Each of Petitioner’s grounds fails to establish that the identified art

discloses or renders obvious every element of the challenged claims, and the Board should therefore deny institution.

A. Legal Standards

The Board may only institute an *inter partes* review where “the information presented in the petition . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a); 37 C.F.R. § 42.108(c). Petitioner bears the burden of showing that this statutory threshold has been met. *See Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (“[T]he Petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.”); *Liberty Mut. Ins. Co. v. Progressive Cas. Ins. Co.*, CBM2012-00003, Paper 8 at 14-15 (Oct. 25, 2012) (representative) (“[I]t is the responsibility of the Petitioner to clearly articulate [the proposed combination].”); 37 C.F.R. §§ 42.22(a)(2), 42.104(b)(4).

The Petition relies solely on obviousness, and more specifically upon combinations of two or more references for each ground. Section 103 of the Patent Act provides that “[a] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter *as a whole* would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” 35

U.S.C. § 103(a) (emphasis added). If a single element of a claim is absent from the prior art, the claim cannot be considered obvious. *See CFMT, Inc. v. YieldUp Int'l Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003) (“[O]bviousness requires a suggestion of all limitations in a claim.”) (citing *In re Royka*, 490 F.2d 981, 985 (C.C.P.A. 1974)); *In re Rijckaert*, 9 F.3d 1531, 1534 (Fed. Cir. 1993) (reversing obviousness rejection where prior art did not teach or suggest all claim limitations); *Garmin Int'l, Inc. v. Patent of Cuozzo Speed Techs. LLC*, Case No. IPR2012-00001, Paper 15 at 15 (Jan. 9, 2013) (refusing to institute an IPR under 35 U.S.C. § 103 where prior art did not disclose all claim limitations).

The conclusion of obviousness based on a combination of references must be supported with explicit analysis of a reason to combine those references. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). The Federal Circuit has stated that such reasons must be more than “mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006); *accord Innogenetics, N.V. v. Abbott Labs.*, 512 F.3d 1363, 1374 (Fed. Cir. 2008) (agreeing with the district court’s reasoning that “some kind of motivation must be shown from some source, so that the jury can understand why a person of ordinary skill would have thought of either combining two or more references or modifying one to achieve the patented method”); *see also LG Elecs., Inc. v. Cellular*

Commc'ns Equip. LLC, IPR2016-00197, Paper 7 at 7-11 (April 29, 2016) (faulting a petition's obviousness analysis for lack of sufficient articulated reasons with rational underpinnings for modifying references to achieve particular elements required in the claims).

B. Petitioner Has Not Shown That the Challenged Claims Are Unpatentable Under Ground 1 (Yamaguchi-Kammer-Moore).

Petitioner has failed to demonstrate that any of the claims Petitioner challenges in Ground 1 (*i.e.*, claims 13-21 and 33-37) are obvious over Yamaguchi, Kammer, and Moore. Petitioner has not demonstrated that two of the elements of independent claims 13 and 33 are disclosed or rendered obvious by the combination of those references. The Board should therefore determine that Petitioner has failed to show a reasonable likelihood that Petitioner will prevail with respect to any of the claims challenged in Ground 1.

i. Overview of Yamaguchi

Yamaguchi describes a system and method for printing electronic documents from a wireless device (*e.g.*, a mobile phone). *See* Ex. 1003, Abstract. According to Yamaguchi, at the time, “wireless devices, such as wireless lap-tops and a variety of different hand-held devices . . . have recently been developed to provide users with the flexibility of remotely connecting to, and accessing a multitude of resources from potentially anywhere in the world.” Ex. 1003, 1:29-35 (emphasis added). According to Yamaguchi, “a drawback with using these wireless devices

is that a user has no easy method of generating a paper ‘hard’ copy of” electronic content. *Id.*, 1:42-44. Yamaguchi describes the specific example of a traveler at an airport who wishes to print a hard copy of a rental car confirmation web page. *Id.* 1:45-53. Yamaguchi indicates that, “because the wireless devices are generally not configured with a printer, the user has no way of generating a hard copy of the electronic document.” *Id.*, 1:53-55.

Yamaguchi purports to address this problem by implementing a “wireless interface component” in an “interface box” that wirelessly communicates with users’ wireless devices to receive electronic document information from the user’s wireless devices, and the interface box also communicates with a printer over a wired communication interface to print documents at the printer. *See* Ex. 1003, 2:55-67; *see also id.*, Fig. 1 (reproduced below).

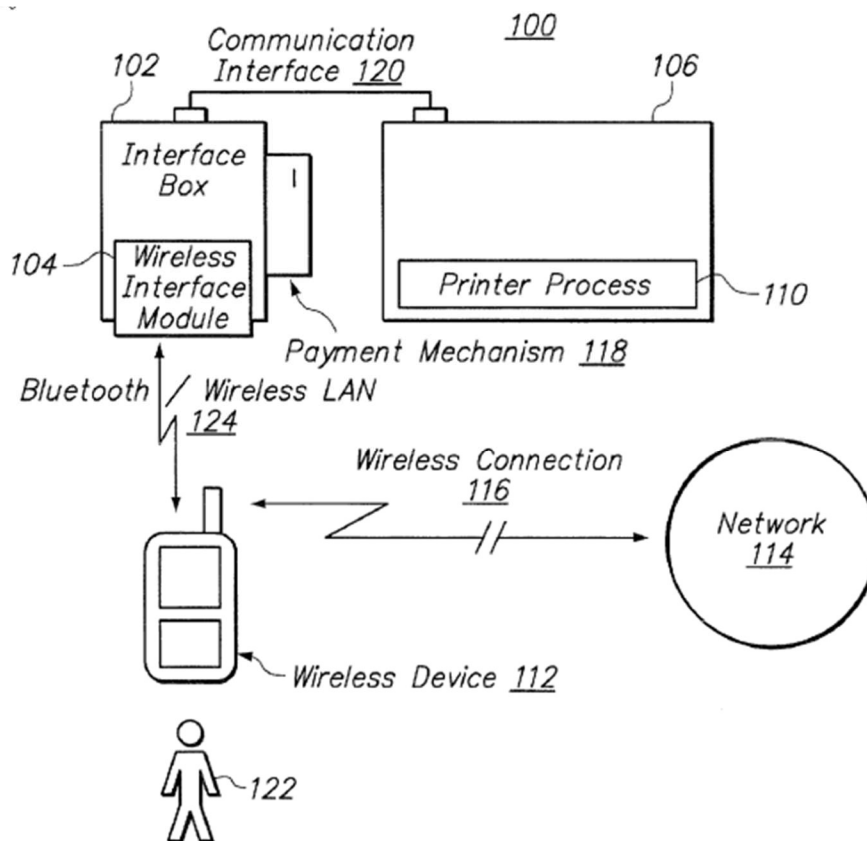


FIG. 1

In the embodiment of Yamaguchi that Petitioner relies upon (*see* Petition at 25-41)—specifically, Yamaguchi’s “Establishing a Wireless Connection” section (Ex. 1006, 7:7-49)—Yamaguchi discloses a coin-operated “interface box” including a coin rack where the user first inserts coin to pay for the use of the printer. *Id.*, 7:13-15. The interface box then generates a random number that it, for example, displays on an LED circuit associated with the coin rack. *Id.*, 7:16-20. The user then establishes a wireless connection between his or her device and the interface box and uses a browser to input the random number. *Id.*, 7:21-44. Once the

random number input is confirmed, the user can proceed to print the document. *Id.*, 7:45-49.

In other words, according to Yamaguchi's disclosure, the user selects the printer he or she wishes to use by inserting coins into the coin rack in the interface box—before ever connecting his/her device to the interface box in any way, and before the user's device receives any information about the printer. *See id.*, 7:7-49.

ii. Overview of Kammer

Kammer discloses a method for managing a wireless device (having a transceiver for wireless communication) when operating in discovery mode in a wireless network of devices, such as a Bluetooth network. Ex. 1007, Abstract, 1:7-11. In particular, Kammer teaches standard steps required for discovering and connecting with another Bluetooth-enabled device using Bluetooth protocols. *Id.*, 1:15-2:58, Fig. 1. However, according to Kammer, the Bluetooth device discovery process presents a number of problems such as power consumption, increasing number of messages (inquiries and inquiry responses, and pages and page responses) exchanged between the devices during discovery process, etc. *Id.*, 2:59-3:65.

To address these drawbacks, Kammer discloses that an initiator device broadcasts an inquiry message. If the responder device is in discoverable mode, it scans for inquiries and sends an inquiry message to the initiator device. In non-

discoverable mode, the responder device may or may not scan for an inquiry message and does not respond to the inquiry message when such message is detected. *Id.*, 4:31-50. By using such a process, the responder device automatically makes itself discoverable or non-discoverable depending on whether the device is, respectively, awake (powered on) or asleep (powered off). *Id.*, 4:62-65. As a result, the responder device will be in discoverable mode for a reduced period of time, conserving power (battery) resources. In addition, the responder device will respond to fewer general inquiry messages, which will also reduce the number of messages that are generated as a result of the inquiry responses (Such as pages and page responses, and name requests and responses to name requests). *Id.*, 5:3-10.

The Petition explicitly states that Petitioner’s “Yamaguchi-Kammer combination only focuses on the basic Bluetooth discovery process in its background and not on Kammer’s power-conserving method.” Pet. at 22 n.3.

iii. Petitioner Has Failed to Meet Its Burden of Showing That Yamaguchi and Kammer Render Obvious Claim Elements 13[b]/33[b], 13[c]/33[c], and 13[d]/33[d].

As discussed above, in Yamaguchi’s system, the user selects the printer he or she wishes to use by inserting coins into the coin rack in the interface box—before ever connecting his/her device to the interface box in any way, and before the user’s device receives any information about the printer. *See id.*, 7:7-49. In contrast to Yamaguchi’s disclosure, independent claims 13 and 33 of the ’402

Patent require “discovering wirelessly one or more wireless devices that are available for wireless connection,” “receiving over the wireless communication channel an attribute corresponding to each the discovered wireless device,” and “selecting a wireless output device from among the one or more discovered wireless devices based at least in part on the received attribute.” Nothing in Yamaguchi discloses wirelessly discovering printer(s), receiving attribute(s), or selecting from among the discovered devices based on those attribute(s).

Petitioner appears to admit Yamaguchi’s shortcoming, instead purporting to rely on Kammer’s disclosures for these claim elements. Pet. at 26-29. Petitioner’s reliance on Kammer presents a separate but related problem. Given Yamaguchi’s system design (*i.e.*, where a user selects a printer to use by inserting coins into the coin rack, and then wirelessly connects to the interface box and enters the random number generated by the interface box into his or her wireless device), there is no need for any wireless discovery process, wireless receiving of any attributes, or connecting to the printer based on the wirelessly received attributes. Indeed, a selection based on attributes (instead of based on inserting coins into the coin rack and inputting the random number) in Yamaguchi could potentially result in the user connecting to a device other than the one in which the user has already inserted his or her coin(s). Therefore, not only would the user lose his or her money in such a scenario, but the user would be unable to print a document

because the user's input of the random number on the coin rack would not allow the user to access the other printer to which the user's device connected based on the attribute(s) received.

Petitioner and its expert completely ignore this flaw in their proposed combination of Yamaguchi and Kammer. The Petition's only asserted rationale for combining Yamaguchi and Kammer is Yamaguchi's passing reference to the use of Bluetooth to perform the wireless communication between the interface box and the user's device. *See* Pet. at 22 (citing Ex. 1006, 4:3-9). The Petition provides no explanation for why a POSITA would have been motivated to implement the specific aspects of Kammer's disclosure identified in its discussion of these elements of claims 13 and 33, nor does the Petition account for the problems discussed above of using a Bluetooth discovery process after a user has inserted coins into the coin rack. *See id.* at 26-29.

Further, in Yamaguchi's system, only after the coin is inserted (at step 502, Fig. 5 of Yamaguchi) and the random number is displayed, the "interface box 102 begins to transmit an RF signal for establishing connection 124 with wireless device 112" (step 508). This means that, before inserting a coin, the printing system of Yamaguchi is not even activated to transmit any RF signal for opening a communication channel or establishing a connection with the user's wireless device, and thus cannot be discovered by the user's wireless device over any

wireless communication protocol (e.g., Bluetooth). This is contrary to the requirements of claims 13 and 33, which require “opening a wireless communication channel” (element 13[a]/33[a]), “discovering wirelessly one or more wireless devices that are available for wireless connection” (element 13[b]/33[b]), and “receiving over the wireless communication channel an attribute corresponding to each discovered wireless device” (element 13[c]/33[c]).

The Board has found similar obviousness theories to be lacking in past cases. For example, in *Johns Manville Corp. v. Knauf Insulation, Inc.*, the Board denied institution of an IPR when the two prior art references the petitioner sought to combine were “considerably different binding systems” and the “[p]etitioner and its declarant have not explained sufficiently why one of ordinary skill in the art would have selected [one reference’s] thermosetting composition for use as a binder in [the other reference’s] material.” IPR2018-00827, Paper 9 (Oct. 16, 2018) at 12. In this case, Yamaguchi and Kammer teach considerably different systems; as discussed above, Yamaguchi is a coin-operated system in which the user enters the random number, and Kammer teaches Bluetooth-based discovery. And, Petitioner has not provided any explanation for why a POSITA would have selected Kammer’s Bluetooth-based discovery for implementation in Yamaguchi’s system, particularly when Yamaguchi teaches its coin-insertion and random-number-input process to allow the user to connect to the printer already.

Petitioner's expert's discussion fares no better, as his only stated reason for combining Yamaguchi and Kammer is that "Kammer provided additional details about opening a wireless communication channel with another Bluetooth device." Ex. 1003, ¶ 128. Despite Petitioner's expert citing to the very same section in Yamaguchi about the use of a coin rack and insertion of coins (*see id.*, ¶¶ 130, 132), Petitioner's expert fails to explain why a POSITA would have been motivated to implement the specific aspects of Kammer's disclosure identified in his discussion of these elements of claims 13 and 33, nor does Petitioner's expert account for the problems discussed above of using a Bluetooth discovery process after a user has inserted coins into the device. *See id.*, ¶¶ 128-134; *see also Johns Manville*, Paper 9 at 12-13 (citing 37 C.F.R. § 42.65(a)) (giving "little weight" to expert testimony that "does not disclose the underling facts or data on which the opinion is based").

Neither Petitioner nor its expert cites to any disclosure from Moore that would cure these deficiencies. *See* Pet. at 26-29; Ex. 1003, ¶¶ 128-134.

Therefore, Petitioner has failed to demonstrate that these claim elements (*i.e.*, elements 13[b]/33[b], 13[c]/33[c], and 13[d]/33[d] as enumerated in the Petition) are disclosed or rendered obvious by the combination of Yamaguchi, Kammer, and Moore. Petitioner has therefore failed to show a reasonable likelihood that it will prevail with respect to the claims challenged in Ground 1.

iv. Petitioner Has Failed to Meet Its Burden of Showing That Yamaguchi and Kammer Render Obvious Claim Elements 13[j]/33[j].

Petitioner's obviousness theory with respect to Ground 1 suffers from an additional, independently fatal flaw. With respect to claim elements 13[c]/33[c], Petitioner alleges that the claimed "attribute corresponding to each discovered wireless device" is met by Kammer's disclosure of sharing a device's address or "user-friendly name." Pet. at 26-27 (citing Ex. 1007, 1:61-2:3, 2:11-18, 2:23-26, 2:32-58). However, it is undisputed that independent claims 13 and 33 require "conforming, at the information apparatus, at least part of the content into an output data encoded with at least one format, the conforming relating at least in part to the attribute received over the wireless communication channel."

Neither the Petition nor Petitioner's expert allege that what they contend is the "attribute" in elements 13[c]/33[c] is at all involved in the "conforming" step of elements 13[j]/33[j], despite the clear antecedent basis requiring Petitioner to do so. For elements 13[j]/33[j], the Petition does not even reference the device's address or user-friendly name (Petitioner's alleges "attributes"). Instead, the Petition discusses Yamaguchi's disclosure of a "print ready file" that is in either a page description language (PDL) or Printer Control Language (PCL) file. Pet. at 35.

The Petition attempts to cure this shortcoming of Yamaguchi by referring to disclosures in Moore. Pet. at 35-38. However, that discussion merely references an alleged combination in which Moore’s “GPD file” is used by Moore’s “unidriver” to generate data for use by the printer. *Id.* at 35-37. This discussion nowhere references the address or user-friendly name that Petitioner identifies as the “attribute” for claim elements 13[c]/33[c]. *Compare* Pet. at 26-28 *with id.* at 34-38. Petitioner cannot allege for one claim element that Kammer’s address or user-friendly name is the claimed “attribute” and allege for another that Moore’s GPD file is that same “attribute.” *Cisco Sys., Inc., v. C-Cation Techs., LLC*, IPR2014-00454, Paper 12 at 9-10 (Aug. 29, 2014) (arguments not made in the Petition will not be considered); *Fidelity Nat’l Info. Servs., Inc., v. Datatransury Corp.*, IPR2014-00489, Paper 9 at 9 (Aug. 13, 2014) (“Under our rules, the petition must contain a ‘full statement of the reasons for the relief requested, including a detailed explanation of the significance of the evidence’”).

Petitioner’s expert only compounds the error, in one place alleging that the received attribute is Kammer’s address or user-friendly name (Ex. 1003, ¶¶ 131-133), and in another alleging that the attribute is Moore’s GDP file (*id.*, ¶ 150).

Moreover, even ignoring this error, Petitioner’s combination does not meet the requirements of elements 13[j]/33[j]. Moore does not disclose that its GPD file is used by the user’s device to conform the content into output data. Instead,

Moore discloses that the “unidriver” on the user’s device uses the information in the GPD file to present printing options to the user, and if selected by the user, to issue commands to the printer. *See, e.g.*, Ex. 1008, 6:57-7:8. Petitioner’s discussion of Moore in the Petition admits as much. *See* Pet. at 35-37 (merely alleging that Moore’s GPD file “allowed for any computer . . . to ‘obtain the necessary information to utilize a particular peripheral . . . to effectively create ‘driverless printing’” and referencing Moore’s disclosure of sending user-selected commands to the printer (citing Ex. 1008, 6:43-56)).

Therefore, Petitioner has failed to demonstrate that these claim elements (*i.e.*, elements 13[c]/33[c] and 13[j]/33[j] as enumerated in the Petition) are disclosed or rendered obvious by the combination of Yamaguchi, Kammer, and Moore. Petitioner has therefore failed to show a reasonable likelihood that it will prevail with respect to the claims challenged in Ground 1 for this reason as well.

v. Yamaguchi Teaches Away From Petitioner’s Proposed Combination With Moore.

Petitioner’s proposed combination of Yamaguchi and Kammer with Moore for elements 13[j]/33[j] suffers from an additional flaw, specifically, that Yamaguchi teaches away from a combination with Moore. Yamaguchi expressly discloses having the user’s device install and use an “appropriate printer driver” for the printer to which the user wishes to print. Ex. 1006, 5:27-40. This is in direct contrast to Moore’s disclosure of “driverless printing” (Moore’s title), in which the

user's device does not need a device driver for the particular printer, but instead the user's device receives information from the printer about its capabilities and uses that information to construct its own driver software. *See* Ex. 1008, Title, Abstract, 1:11-2:47.

Thus, for all of these reasons, Petitioner has failed to show a reasonable likelihood that it will prevail with respect to independent claims 13 and 33.

vi. Dependent Claims

The remaining claims challenged in Ground 1 depend from either independent claim 13 or 33. Petitioner has therefore failed to show a reasonable likelihood that it will prevail with respect to any of those challenged dependent claims for the reasons discussed above.

C. Petitioner Has Not Shown That the Challenged Claims Are Unpatentable Under Ground 2.

Petitioner has also failed to demonstrate that the lone claim Petitioner challenges in Ground 2 (dependent claim 21) is obvious in light of Yamaguchi, Kammer, Moore, and Davis. As discussed above, the combination of Yamaguchi, Kammer, and Moore fails to disclose or render obvious the elements of independent claim 13, from which claim 21 depends. None of Petitioner's discussion of Davis cures the deficiencies in its combination of Yamaguchi, Kammer, and Moore, nor does Petitioner even reference elements 13[b]/33[b], 13[c]/33[c], 13[d]/33[d], or 13[j]/33[j] in Ground 2. *See* Pet. at 46-49. The Board

should therefore determine that Petitioner has failed to show a reasonable likelihood that Petitioner will prevail with respect to any of the claims challenged in Ground 2 for the same reasons as discussed above with respect to Ground 1.

D. Petitioner Has Not Shown That the Challenged Claims Are Unpatentable Under Ground 3.

Petitioner similarly has failed to demonstrate that any of the claims Petitioner challenges in Ground 3 (*i.e.*, claims 1-7, 9-21, and 23-27) are obvious over Yamaguchi, Kammer, and U.S. Patent Application Publication No. 2002/0078160 (“Kemp”). Independent claims 1 and 23 contain substantially similar “searching” (akin to claims 13/33’s “discovering”), “receiving,” “selecting,” and “generating” (akin to claims 13/33’s “conforming”) elements. *Compare* elements 13[b]/33[b]/13[c]/33[c]/13[d]/33[d]/13[j]/33[j] *with* elements 1[c]/23[c]/1[d]/23[d]/1[e]/23[e]/1[g]/23[g]. As discussed above, the combination of Yamaguchi and Kammer fails to disclose or render obvious the elements of independent claims 13 and 33, and thus similarly fails to disclose or render obvious claim elements 1[c]/23[c], 1[d]/23[d], 1[e]/23[e], and 1[g]/23[g] for the same reasons. For elements 1[c]/23[c], 1[d]/23[d], and 1[e]/23[e], Petitioner simply references its discussion of claim 13. *See* Pet. at 53.

For element 1[g]/23[g], Petitioner references Kemp’s discussion of “render[ing] the print job into a neutral printer definition language (NPDL).” Pet. at 55 (citing Ex. 1009, at [0068]). Just as with Petitioner’s failure with respect to

Ground 1 (discussed above), this description (and Petitioner’s discussion thereof) fails to account for the challenged claims’ requirement that the “generating” in elements 1[g]/23[g] be “based on” the “received attribute,” which Petitioner alleges is met by Kammer’s disclosure of an address or user-friendly name. Pet. at 53 (referring to discussion of Ground 1). Perhaps recognizing the shortcomings of its previous grounds, Petitioner attempts to cure this defect by referring to Kemp’s disclosure that “the rendered NPDL data is packaged in a transport protocol for transport via [the Internet] by [the] printer driver.” Pet. at 55-57. But even that disclosure fails to identify any “received attribute,” much less how the data is “generat[ed]” “based on” such an attribute.

Additionally, in Kemp, it is the service provider, and not the host computer 10 (asserted wireless device in Yamaguchi) which “converts the NPDL print data into a printer specific format based on the printer selected by the operator and submits the print data to the printer for printing.” Ex. 1009, ¶ [0087]. There is no disclosure or suggestion in Yamaguchi or Kemp (or in the Petition) of how the functionality of Kemp’s service provider can be incorporated into Yamaguchi’s user’s wireless device. Therefore, Kemp cannot further be combined with Yamaguchi and Kammer to teach the claim element 1[g]/23[g].

Moreover, Petitioner’s effort to tie “the printer’s address . . . received as part of Bluetooth discovery” to “Kemp’s use of the print service device’s Internet

address to communicate[] with it” is fundamentally flawed. First, Petitioner’s stated reason for doing so is the ’402 Patent’s own specification—in other words, Petitioner is impermissibly using the ’402 Patent inventors’ own disclosure as the roadmap for its obviousness argument, which is the epitome of hindsight. Second, the Petition fails to explain any alleged relationship between Kammer’s disclosure of an address used during Bluetooth discovery, to Kemp’s disclosure of an Internet address. Third, the packaging of data for transport over a given protocol (such as IP) is not a “conforming . . . of the content into one or more output images” or a “generating . . . intermediate output data, the intermediate output data conforming at least partly based on . . . said received attribute of the selected output device,” as recited in claims 1 and 23. Such packaging does not generate “one or more output images,” nor does it generate “intermediate output data.”

Ground 3 also challenges independent claims 9 and 28, and Petitioner’s analysis for elements of those claims refers back to its discussion of independent claim 1. Pet. at 64-65 (elements 9[b][f]/28[b]-[f] referring back to elements 1[c]-[g], respectively). Petitioner’s challenges to those independent claims (and their dependent claims) fails for the same reasons discussed above.

Similarly, Ground 3 also challenges independent claims 13 and 33, but Petitioner’s analysis in this ground for those claims refer back to its arguments for Ground 1, which as discussed above are fatally flawed. Petitioner offers no

explanation for how the disclosures of Kemp cure the deficiencies of the proposed combination of Yamaguchi and Kammer. *See* Pet. at 67.

The remaining claims challenged in Ground 3 depend from one of the above-referenced independent claims. Petitioner has therefore failed to show a reasonable likelihood that it will prevail with respect to any of those challenged dependent claims for the reasons discussed above.

The Board should therefore determine that Petitioner has failed to show a reasonable likelihood that Petitioner will prevail with respect to any of the claims challenged in Ground 3.

E. Petitioner Has Not Shown That the Challenged Claims Are Unpatentable Under Ground 4.

Ground 4 only challenged claim 8, which depends from claim 1, and does so based on a proposed combination of Yamaguchi, Kammer, Kemp, and Behlok. Claim 8 includes all of the elements of claim 1. As discussed above, the combination of Yamaguchi and Kammer fails to disclose or render obvious certain elements of claim 1, and Petitioner's flaws understanding of Kemp dooms its proposed combination. Petitioner has not offered any explanation for how Behlok somehow overcomes these deficiencies.

The Board should therefore determine that Petitioner has failed to show a reasonable likelihood that Petitioner will prevail with respect to any of the claims challenged in Ground 4.

V. PETITIONER’S “ADDITIONAL CONSIDERATIONS” HAVE NO MERIT AND DO NOT WARRANT INSTITUTING THIS IPR.

In a last-ditch effort to try to convince the Board that challenges to the ’402 Patent’s claims have merit, Petitioner alleges (without any supporting evidence or authority) that Patent Owner engaged in “behavior and gamesmanship that included withholding material from the Office in order to avoid the impact of terminal disclaimers.” Pet. at 77. Petitioner argues that Patent Owner committed these acts by allegedly withholding another patent invented by Mr. Chang and Ms. Liu (U.S. Patent No. 7,941,541) from the examiner. *Id.* Petitioner ignores that numerous other patent applications from the inventors are cited on the face of the ’402 Patent. Petitioner also ignores that, as part of the examination of the application leading to the ’402 Patent, the examiner conducted multiple “Inventor Name Searches” in November 2008, March 2009, and June 2009 that would have yielded the ’541 Patent as a search result because its inventors are identical to those of the ’402 Patent. *See* Ex. 1001 at p. 41, 131, 209.

In addition, while Petitioner’s assertions about double-patenting cannot be raised in (and thus are irrelevant to) this proceeding, Patent Owner notes that at no time during the pendency of the application leading to the ’402 Patent) were the claims of that application similar or obvious variants to the claims of the application leading to the ’541 patent. To the extent Petitioner’s description here warrants further elaboration as to elements of pending or issued claims that differ

between these applications/patents, Patent Owner reserves the right to identify such differences at a later date.

Furthermore, Patent Owner notes that, during the prosecution of the application leading to the '541 patent, the publication version of the application leading to the '402 Patent was disclosed and is listed on the face of the '541 patent. Ex. 1005 at p. 2 (citing U.S. Patent Application Publication No. 2002/0097415). The Examiner therefore could have (but did not) raise any double patenting rejection.

Petitioner's assertions therefore have no merit, and they are certainly no reason to institute an IPR petition that, as discussed above, has fatal flaws with each of its grounds.

VI. CONCLUSION

The Board should deny institution. Each of Petitioner's grounds fail to establish a reasonable likelihood that Petitioner will prevail with respect to any of the challenged claims.

Dated: August 23, 2023

By: /s/ C. Austin Ginnings

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CERTIFICATE OF COMPLIANCE WITH WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), I certify that this Response complies with the type-volume limits of 37 C.F.R. § 42.24(b)(1) because it contains 6,402 words, excluding the parts of this Patent Owner's Preliminary Response that are exempted by 37 C.F.R. § 42.24(a)(1), according to the word processing system used to prepare this Patent Owner's Preliminary Response.

Dated: August 23, 2023

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CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing Patent Owner's Preliminary Response was served on August 23, 2023, to Lead and Back-up Counsel for Petitioner at the service address provided in Petitioner's Mandatory Notices:

Email: Lexmark-FlexiworldIPR@perkinscoie.com

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