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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* PAUL JERAN

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Appeal 2018-005677  
Application 15/458,460  
Technology Center 2800

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Before LINDA M. GAUDETTE, MARK NAGUMO, and  
DONNA M. PRAISS, *Administrative Patent Judges*.

PRAISS, *Administrative Patent Judge*.

DECISION ON APPEAL<sup>1</sup>

Pursuant to 35 U.S.C. § 134(a), Appellant<sup>2</sup> appeals from the Examiner's decision to reject claims 1–15. We have jurisdiction under 35 U.S.C. § 6(b). We AFFIRM.

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<sup>1</sup> In this Decision, we refer to the Specification filed Mar. 14, 2017 (“Spec.”), the Final Office Action dated Aug. 31, 2017 (“Final Act.”), the Appeal Brief filed Jan. 13, 2018 (“Appeal Br.”), the Examiner’s Answer dated Mar. 27, 2018 (“Ans.”), and the Reply Brief filed May 10, 2018 (“Reply Br.”).

<sup>2</sup> We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Hewlett-Packard Development Company, LP is the applicant and also identified as the real party in interest. Appeal Br. 1.

### STATEMENT OF THE CASE<sup>3</sup>

The invention relates to a printer cartridge for toner, ink, and other materials that also includes a memory enabling an information exchange between the cartridge and the printer controller. Spec. ¶ 2. The Specification describes ensuring that a printer will not print with an unauthorized cartridge as a use of the memory on a printing material cartridge. *Id.* ¶ 13.

Claim 2, reproduced below, together with claim 1 from which it depends, is illustrative of the subject matter on appeal (emphasis added).<sup>4</sup>

1. An article for a printing material cartridge, comprising a memory to prompt a printer controller to write a printer identifier to the memory when a cartridge with the memory is installed in a printer.

2. The article of Claim 1, where the memory includes a first memory address and a second memory address, *the first memory address having information therein that when read by a printer controller prompts the printer controller to write a printer identifier to the second memory address.*

Appeal Br. 10 (Claims Appendix).

### ANALYSIS

We review the appealed rejections for error based upon the issues Appellant identifies, and in light of the arguments and evidence produced thereon. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential) cited with approval in *In re Jung*, 637 F.3d 1356, 1365 (Fed. Cir. 2011)

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<sup>3</sup> This appeal is related to Appeal Nos. 2018-005676, 2019-002174, and 2019-002214. *See* Appeal Br. 1 (identifying the Notice of Appeal filed for Appeal No. 2018-005676).

<sup>4</sup> Appellant does not appeal the rejection of claims 1, 6, and 7. Appeal Br. 1, 10. Accordingly, we summarily affirm the rejection of claims 1, 6, and 7.

("[I]t has long been the Board's practice to require an applicant to identify the alleged error in the examiner's rejections."). After considering the argued claims in light of the case law presented in this Appeal and each of Appellant's arguments, we are not persuaded of reversible error in the Examiner's rejections.

*Rejection 1: Anticipation*

The Examiner rejects claims 1–3, 6–8, and 13 under 35 U.S.C. § 102(a) as anticipated by Johnson<sup>5</sup> for the reasons provided on pages 3–10 of the Final Action.

Appellant separately argues claims 2, 8, and 13. App. Br. 3–7. Therefore, claim 3 stands or falls with claim 2 from which it depends. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Appellant contends that the Examiner erred in finding that Johnson discloses memory that "prompts [a] printer controller to write a printer identifier to [a] second memory address" as recited in claim 2 and required by claims 8 and 13. App. Br. 4–6. According to Appellant, Johnson's memory 21 includes a memory address at which printer identifier 14 is stored, however "there is no other address in Johnson's memory 21 with a prompt to prompt the printer controller to write an identifier 14 to memory 21." *Id.* at 4. Appellant notes that Johnson discloses that printer 21 queries the component to determine whether printer identifier 14 stored in component memory 21 matches the ID for printer 21 and, if the answer is no, the printer queries the component a second time to determine whether the component is new and then the printer writes its own ID to memory 21 if

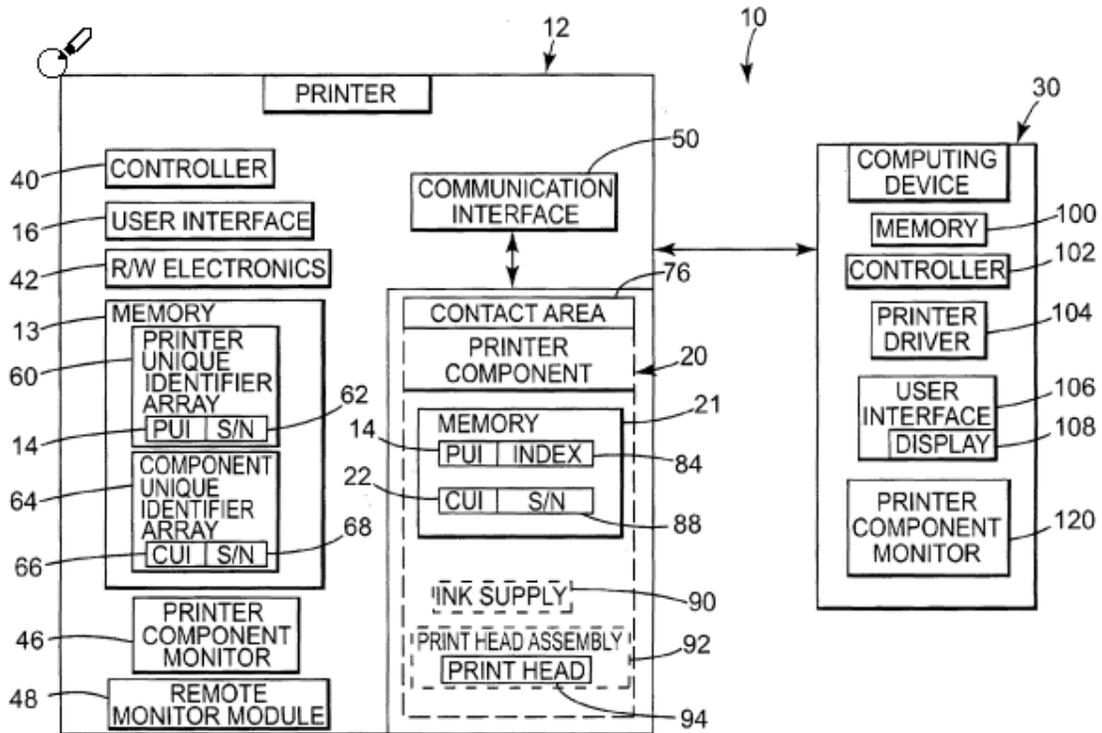
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<sup>5</sup> US 2004/0212651 A1, published Oct. 28, 2004.

the answer to the second query is yes. *Id.* at 5 (citing Johnson ¶¶ 48–50, Fig. 6, steps 304, 306, 308, 310). Appellant contends “it seems likely the printer writes this ID to the same address queried in step 204 — the address of printer identifier 14 in memory 21” rather than another different memory address. *Id.*

Appellant’s analysis for claims 2 and 8 is the same. *Id.* at 5. Regarding claim 13, Appellant additionally argues that the first address of the claimed memory has a prompt value or a no prompt value and a second address has an identification value or a no identification value, which means there are four possible value combinations claimed. *Id.* at 3–4. Appellant contends that Johnson does not disclose any of these combinations because Johnson’s printer identifier 14 “exists at a single memory address” and it “cannot be both a prompt or no value at one address and an identification value at a different address.” *Id.* at 4. Regarding whether Appellant’s apparatus claims require merely a memory, Appellant contends that claims 2, 8, and 13 include functional limitations on the memory as to the content of information at the first memory address. *Id.* at 6–7.

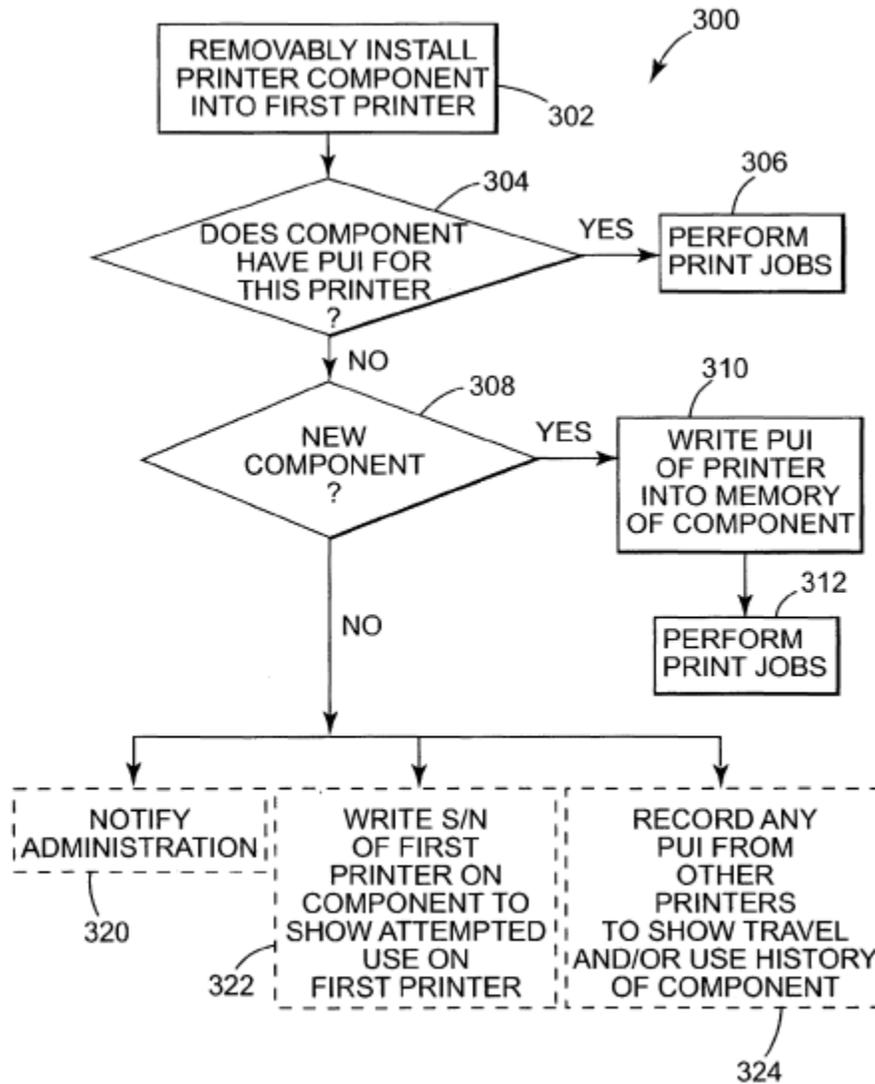
The Examiner responds to each of Appellant’s arguments directed to claims 2, 8, and 13 that Johnson discloses a memory with multiple memory addresses. Ans. 3–5 (citing Johnson 27, Fig. 2, memory 21). Johnson’s Figure 2 is reproduced below.



**Fig. 2**

Figure 2 is a block diagram of a replaceable printer component system. Johnson ¶ 7. As shown in Figure 2, printer component 20 comprises memory 21 which includes at least one printer unique identifier (PUI) 14 and component unique identifier 22. *Id.* ¶ 27. According to Johnson, PUI index 84 stores a list of printers for which use with printer component 20 is authorized. *Id.*

The Examiner further explains that, even though Johnson does not specifically state that a separate memory address is checked in response to query 304 in Johnson's Fig. 6, a separate memory location is deduced from the subsequent query in step 308. *Id.* (citing Johnson ¶ 48, Fig. 6, steps 304, 308). Johnson's Figure 6 is reproduced below.



**Fig. 6**

Figure 6 is a flow diagram of a method of managing replaceable printer component tool. Johnson ¶ 11. According to Johnson, step 304 queries whether a printer unique identifier 14 stored in memory 21 matches the printer unique identifier of the printer into which printer component 20 was installed. *Id.* ¶ 48. Johnson discloses that an affirmative response results in permitting print jobs and other functions (step 306). *Id.* ¶ 49. Johnson describes a negative response resulting in a further query (step 308) as to

whether printer component 20 is a new component that has not been installed previously on any printer. *Id.* As shown in Figure 6, regardless of whether the response to the query of step 308 is affirmative or negative, the controller is prompted to write to memory (shown as separate boxes 310 or 322).

The Examiner further finds that Johnson discloses writing a serial number (S/N) onto the memory of the cartridge in step 322 of Figure 6 if the step 304 and 308 queries are negative, thus Johnson discloses a first address for a printer identification “prompt” and a second address for a printer “identifier” as required by claim 13. Ans. 3. Regarding the structural requirements of the apparatus claims, the Examiner states the function of storing information at one memory address that prompts a printer controller to write a printer ID to another memory address is a memory with multiple addresses and a controller. *Id.* at 5. According to the Examiner, information that “prompts” is any information or lack of information and how that information is intended to be used. *Id.* at 5–6. The Examiner finds that Johnson discloses that information stored in the memory is printer identification information. *Id.* at 6.

In the Reply Brief, Appellant maintains that Johnson’s printer identifier 14 exists at a single memory address and, therefore, cannot be both a prompt or a no prompt value at one address and an identification value at another address. Reply Br. 1. Appellant contends that the Examiner’s finding that each query in Johnson “‘appears’ to have its own memory address” is insufficient to establish anticipation. *Id.* Regarding Johnson’s serial number being written to a second memory address different from the memory address of printer identifier 14, Appellant contends that Johnson

discloses that the printer serial number is one example of printer identifier 14 and Johnson's paragraph 51 regarding writing a serial number into memory 21 fails to mention the location in memory 21 where the serial number is written. *Id.* at 2.

Appellant's arguments do not persuade us that the Examiner reversibly erred in rejecting the claims as anticipated, and, more specifically, finding that Johnson's replaceable printer component comprises a first memory address that prompts a printer controller to write a printer identifier to the a second memory address, as each of claims 2, 8 and 13 requires. The preponderance of the evidence in this appeal record supports the Examiner's finding that the claimed subject matter of claims 2, 8, and 13 is anticipated within the meaning of Section 102 in view of Johnson. Accordingly, we sustain the Examiner's rejection for essentially those reasons expressed in the Answer, including the Response to Argument section, and we add the following primarily for emphasis.

In order to anticipate, a reference must identify something falling within the claimed subject matter with sufficient specificity to constitute a description thereof within the purview of section 102. *In re Schaumann*, 572 F.2d 312, 317 (CCPA 1978). It is well established that anticipation under section 102 is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 832 (Fed. Cir. 1990). This is particularly true when the features of an apparatus are claimed functionally rather than structurally as are claims 2, 8, and 13. *See In re Swinehart*, 439 F.2d 210, 212 (CCPA 1971) (“[T]here is nothing intrinsically wrong with [defining something by what it does rather than what it is] in drafting patent claims.”). Yet, choosing to define an element functionally, i.e., by what it

does, carries with it a risk. *In re Schreiber*, 128 F.3d 1473, 1478 (Fed. Cir. 1997). As stated in *Swinehart*, 439 F.2d at 213:

where the Patent Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on.

As applied to Johnson, the issue is whether Johnson's structure is capable of performing the function without further programming. *Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1380 (Fed. Cir. 2011) (discussing *Microprocessor Enhancement Corp. v. Texas Instruments, Inc.*, 520 F.3d 1367 (Fed. Cir. 2008)). When the functional language is associated with programming or some other structure required to perform the function, that programming or structure must be present in order to meet the claim limitation. *Id.* In some circumstances generic structural disclosures may be sufficient disclosure of the structure that performs the work. *See Ergo Licensing, LLC v. CareFusion 303, Inc.*, 673 F.3d 1361, 1364 (Fed. Cir. 2012) (citing *Telcordia Techs., Inc. v. Cisco Sys., Inc.*, 612 F.3d 1365, 1376–77 (Fed. Cir. 2010)).

Appellant does not dispute the Examiner's finding (Ans. 3) that Johnson discloses a printer cartridge comprising memory with multiple memory addresses. Appellant does not dispute the Examiner's finding (Final Act. 5) that Johnson's printer controller queries the memory of the cartridge and is prompted to write a printer identifier to the memory when a cartridge with the memory is installed in a printer. Appellant does not

dispute the Examiner's finding (Ans. 3) that Johnson discloses multiple queries are made by Johnson's controller. Appellant also does not rebut the Examiner's determination (Ans. 5) that the structure functionally claimed by claims 2, 8, and 13 to perform the function of storing information at one memory address that prompts a printer controller to write a printer ID to another memory address is a memory with multiple addresses and a controller.

The record supports the Examiner's finding (Ans. 3) that Johnson discloses a printer controller query whether the printer has a unique identifier. Johnson 48, Fig. 6, 304. The record also supports the Examiner's finding that a further query in step 308 (Johnson Fig. 6, 308) indicates the query is independent subsequent to the query in step 304 and therefore has its own memory location. Appellant's position (Reply Br. 1) that the Examiner's finding is insufficient to establish anticipation by Johnson is not persuasive of error because it does not adequately show that Johnson's printer controller is not set up to write a printer ID to another memory address, particularly in view of Johnson's memory having multiple memory addresses.

The record also supports the Examiner's finding (Ans. 3) that Johnson discloses writing a serial number into the memory of the cartridge in response to a negative prompt that is separate from the identifier located at a unique address in the memory. Johnson ¶ 51. Appellant asserts that, because Johnson's paragraph 20 identifies a printer serial number as an example of a printer identifier, the query described in Johnson's paragraph 51 prompts the printer to write a serial number into the same memory address as the printer identifier. Reply Br. 2. However, Johnson's

paragraph 51 discloses that printer 12 writes a serial number into the memory of the printer component at a negative response prompt (because the printer component had been previously installed elsewhere) in order to save the information in printer 12 for tracking the presence of printer component 20 (shown in box 322 of Fig. 6) and a travel/use history of printer component 20 can be obtained from the memory of printer component 20 as well. Appellant does not adequately explain why the same memory location for printer identifier 14 would have been used for tracking the travel/use history of printer component 20.

Accordingly, we affirm the Examiner's rejections of claims 1–3, 6–8, and 13 under 35 U.S.C. § 102(a) as anticipated by Johnson.

*Rejection 2: Obviousness*

The Examiner rejects claims 4, 5, 9–12, 14, and 15 under 35 U.S.C. § 103 over the combination of Johnson and Ehrhardt<sup>6</sup> for the reasons provided on pages 11–14 of the Final Action.

Appellant does not provide separate arguments for this rejection. App. Br. 8. Therefore, we select claim 4 as representative and claims 5, 9–12, 14, and 15 stand or fall with claim 4. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Appellant contends that the Examiner erred because the claims require that the information in the first memory address includes a single bit value, however Johnson does not teach or suggest a single bit value for a printer identifier 14 and “Ehrhardt does not teach or suggest that a single bit could or should be used for a memory prompt in general, and specifically not a

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<sup>6</sup> US 2007/0081842 A1, published Apr. 12, 2007.

prompt as recited in claims 4, 9, and 14.” App. Br. 8. Appellant asserts that Ehrhardt’s general teaching that some types of memory information might be formed with a single bit, does not render obvious the claimed single bit memory limitations. *Id.* Appellant further argues that the Examiner’s reason for combining Ehrhardt and Johnson “to properly store the information” is not supported or explained because neither Johnson nor Ehrhardt discloses how to properly store memory information in general and specifically not as a memory prompt. *Id.*

Appellant’s arguments do not persuade us that the Examiner reversibly erred in rejecting the claims over the cited prior art references. As the Examiner finds and the record supports, Johnson discloses memory information being used as a prompt. Ans. 7; Johnson Fig. 6. The Examiner’s finding that Ehrhardt discloses the use of single bit memory for printer identifiers specifically is also supported by the record. Ans. 7; Ehrhardt ¶¶ 47, 48. Ehrhardt’s explicit teaching to use “any single electronic data bit, or any combination of electronic data bits of a form as is known in the art to be of the type typically stored on such a memory component” (Ehrhardt ¶ 47) supports the Examiner’s determination that it would have been obvious to combine Ehrhardt’s teaching in Johnson’s memory information and printer component. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 420 (2007) (“in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.”). In *KSR*, the Supreme Court instructed that “when a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result.” 550 U.S. at 416. The Court stated that “[i]f a person of

ordinary skill can implement a predictable variation [of a prior art reference with other prior art components], § 103 likely bars its patentability.” *Id.* at 417. Here, including a single bit value for a printer identifier memory as taught by Ehrhardt in the memory information used as a prompt by Johnson’s printer component would have yielded a predictable result: the information in the first memory address includes a single bit value that when read by a printer controller prompts the printer controller to write a printer identifier to the second memory address—the invention claimed.

For these reasons and those the Examiner provides, we uphold the Examiner’s rejection of claims 4, 5, 9–12, 14, and 15 under 35 U.S.C. § 103 as obvious over the cited prior art references.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

### CONCLUSION

In summary:

<b>Claims Rejected</b>	<b>Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1–3, 6–8, and 13	§ 102(a)(1) Johnson	1–3, 6–8, and 13	
4, 5, 9–12, 14, and 15	§ 103 Johnson and Ehrhardt	4, 5, 9–12, 14, and 15	
<b>Overall Outcome</b>		1–15	

AFFIRMED