

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MAPLEBEAR INC. D/B/A INSTACART,
Petitioner,

v.

CONSUMERON, LLC,
Patent Owner.

IPR2023-00865
U.S. Patent No. 11,238,465

**PETITION FOR *INTER PARTES* REVIEW
UNDER 35 U.S.C. § 312 AND 37 C.F.R. § 42.104**

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PETITIONER’S EXHIBIT LIST

Ex.1001	U.S. Patent No. 11,238,465
Ex.1002	Prosecution History of U.S. Patent No. 11,238,465
Ex.1003	Declaration of Dr. Henry Houh under 37 C.F.R. § 1.68
Ex.1004	<i>Curriculum Vitae</i> of Dr. Henry Houh
Ex.1005	U.S. Patent Application Publication No. 2016/0148302 to Carr et al.
Ex.1006	U.S. Patent No. 10,592,962 to Lauka et al.
Ex.1007	U.S. Patent Application Publication No. 2021/0182930 to Yee et al.
Ex.1008	U.S. Patent Application Publication No. 2013/0085807 to Deborah Anne Cincotta
Ex.1009	U.S. Patent Application Publication No. 2014/0149160 to Argue et al.
Ex.1010	U.S. Patent No. 10,510,084 to Dearing et al.
Ex.1011	U.S. Patent Application No. 13/270,848 (as filed)
Ex.1012	Redline Comparison of ’133 Application and ’848 Application
Ex.1013	Order, 1:21–cv–01147, Dkt. 201 (D.Del) (1.18.2023)
Ex.1014	Memorandum Opinion, 1:21–cv–01147, Dkt. 200
Ex.1015	“Research and Application of the EAN-13 Barcode Recognition on Iphone,” Li et al., 2010 International Conference on Future Information Technology and Management Engineering, IEEE 2010
Ex.1016	“Shop Social: The Adventures of a Barcode Scanning Application in the Wild,” Engelsma et al., Fourth International Conference on Mobile Computing, Applications and Services, Institute for Computer Sciences, Social Informatics and Telecommunications Engineering 2013

Ex.1017	Oxford English Dictionary (excerpts)
Ex.1018	U.S. Patent Application Publication No. 2003/0006974 to Clough et al.
Ex.1019	U.S. Patent Application Publication No. 2002/0027164 to Mault et al.
Ex.1020	U.S. Patent 7,734,729 to Du et al.
Ex.1021	“Spotlight: The Rise of the Smart Phone,” Zheng et al., IEEE Distributed Systems Online March 2006, IEEE 2006
Ex.1022	May 24, 2019 Wayback Machine capture of Barcodelookup.com (https://web.archive.org/web/20190524041844/https://www.barcodelookup.com/)
Ex.1023	U.S. Patent 7,156,311 to Attia et al.
Ex.1024	U.S. Patent 7,233,914 to Wijaya et al.
Ex.1025	U.S. Patent 10,628,835 to Barron et al.
Ex.1026	“Review Spotlight: A User Interface for Summarizing User-generated Reviews Using Adjective-Noun Word Pairs,” Yatani et al., CHI 2011, May 7–12, 2011, Association of Computer Machinery
Ex.1027	“‘Popularity Effect’ in User-Generated Content: Evidence from Online Product Reviews,” Goes et al., Information Systems Research 25(2):222-238 (2014)
Ex.1028	Microsoft Computer Dictionary (excerpts)

I. INTRODUCTION

U.S. Patent No. 11,238,465 (“’465 patent,” Ex.1001) is generally directed to remote acquisition and delivery of goods ordered over the Internet. The ’465 patent attempts to solve “many potential problems” associated with electronic commerce (e-commerce), such as slow delivery and “inadequate” pictures of available items. Ex.1001, 1:35-2:13.

The alleged solution recited in the claims, however, is not one of the solutions described in the specification. The claims recite a method in which an item ordered by a customer cannot be located by a delivery agent, and the customer is thus prompted to choose a replacement item based on an image of a potential replacement item. *See* Ex.1001, claim 1. This process is not disclosed in the ’465 patent specification or any ancestor application, and as a result, the ’465 patent claims are only entitled to the April 2020 filing date of the application which matured into the ’465 patent. *See infra* §VI. And, before the April 2020 priority date, the claimed process was well known and would have been obvious. For example, Carr (Ex.1005) teaches a nearly-identical process for delivering a replacement item to a customer when the ordered item is “unavailable.” Ex.1005, Abstract.

Accordingly, pursuant to 35 U.S.C. §§311, 314(a), and 37 C.F.R. §42.100, Mapbear Inc. d/b/a Instacart (“Petitioner”) respectfully requests that the Board

review and cancel as unpatentable under 35 U.S.C. §103 claims 1-19 (the “Challenged Claims”) of the ’465 patent.

II. GROUNDS FOR STANDING

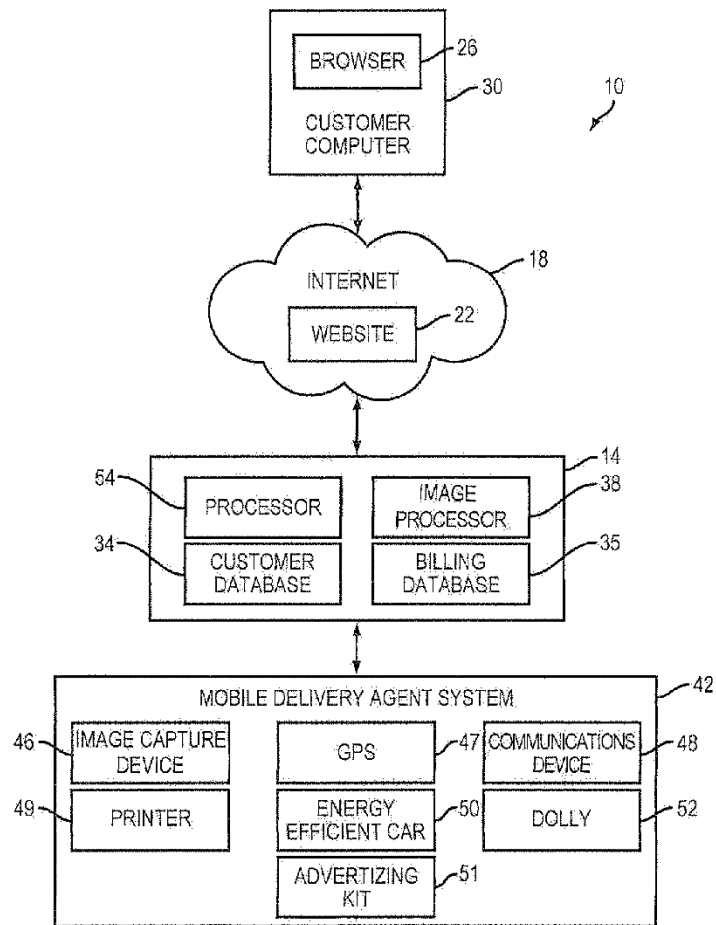
Petitioner certifies that the ’465 patent is eligible for IPR and that Petitioner is not barred or estopped from requesting IPR challenging the patent claims. 37 C.F.R. §42.104(a).

III. NOTE

Petitioner cites to the exhibits’ original page numbers. **Emphasis** in quoted material has been added. Claim terms are *italicized*.

IV. SUMMARY OF THE ’465 PATENT

The ’465 patent “pertains to customer shopping and, more particularly, to a system and method for remote acquisition and delivery of goods.” Ex.1001, 1:29-31. The patent’s system is shown in Figure 1’s “remote acquisition and delivery system.” *Id.*, 3:19-21.



Ex.1001, Fig. 1

The system includes a “services provider [] equipped with at least one server 14 in communication with a wide area network (WAN), such as the internet 18.” *Id.*, 3:21-23. A user, “via a customer computer 30”, “accesses a user interface,” which may be a website or application on the user’s mobile device. *Id.*, 3:23-33. Server 14 includes “customer database 34,” “billing database 35” and “digital image capture processor 38” and “is in contact with a plurality of mobile delivery agent systems, such as indicated at 42.” *Id.*, 3:40-46.

Each mobile delivery agent system “includes a digital image capture device 46, such as a cell phone or other similar device incorporating a digital camera for taking still or video images...a global positioning system (GPS) 47, a communications system or device 48 and a printer 49.” *Id.*, 3:46-53. The GPS “is preferably utilized to track a mobile delivery agent.” *Id.*, 3:53-56.

Figure 2 depicts a “method for utilizing system 10.” *Id.*, 4:26-27. After a customer registers with the system, the customer “may enter in the area he or she is interested in obtaining services” by “entering his or her local zip code or the address of a store where a desired product is being sold.” *Id.*, 5:1-6. Subsequently, “information regarding the location and status of delivery agents in the desired area is displayed,” and the user may select a delivery agent. *Id.*, 5:6-10. The user may specify the exact location from which the agent is to purchase a product, or the system may calculate the closest location for the purchase. *Id.*, 5:34-39.

After selection of a store location, the “selected delivery agent travels to the store location...and finds the desired product to be acquired.” *Id.*, 7:13-15. The “digital image capture device 46 is utilized to provide a streaming ‘street view’ for the customer’s entertainment and to show the progress of the delivery agent.” *Id.*, 7:15-18. Additionally, the “GPS 47 is utilized...to dynamically update the customer as to the location of the delivery agent.” *Id.*, 7:19-21.

When the delivery agent arrives at the location, the delivery agent

“communicates to the customer that the product has been identified, and the customer has the option of inspecting the product in real-time.” *Id.*, 7:33-35. “If the customer chooses to inspect the product,... the delivery agent will utilize digital image capture device 46 to transmit real-time data to customer computer 30.” *Id.*, 7:36-40. The customer may then approve or reject the product. If the customer approves, the delivery agent acquires the product and delivers it. *See id.*, 8:4-8.

As explained below, the ’465 patent claims a process that does not correspond to its written description. Specifically, the ’465 patent specification presupposes that the goods ordered by the customer are available, because the delivery agent “communicates to the customer that the product has been identified.” *Id.*, 7:33-35. The specification does not contemplate a situation in which the delivery agent cannot locate the product or what actions the delivery agent should take in such a situation, despite the independent claims reciting exactly that. Likewise, as detailed below, the ’465 patent specification also does not support the claimed limitation of using barcodes or QR codes to obtain image data for transmission to a customer. As a result, the ’465 patent, which claims priority as a continuation of earlier applications, is in fact **not entitled** to claim priority to any earlier application. Analyzed according to its correct priority date in April 2020, the features recited in the challenged claims were well-known, as shown below, by Carr and other references. Thus, the challenged claims should not

have been allowed.

V. PROSECUTION HISTORY

The '465 patent issued from U.S. Application 16/853,133 (“’133 application”) filed April 20, 2020, which claims priority to U.S. Application 13/270,848 (“’848 application”), filed October 11, 2011, which in turn claims priority to multiple previous applications, the earliest of which was filed August 26, 2009. As shown below, however, the '465 patent is not entitled to claim the benefit of priority to any earlier application, and its priority date is April 20, 2020.

During prosecution, the as-filed claims were rejected as obvious (*see* Ex.1002, 72-90) over a combination of references not at issue here. In response, the applicant amended the claims to recite, with respect to the claim that issued as claim 1, that “the information” determined from a bar or QR code “includes at least one image of the identified product” and with respect to the claim that issued as claim 14, that the “information” determined from a bar or QR code “includes at least one image of the replacement product.” *Id.*, 55-67.

The examiner then conducted an interview with the applicant and proposed an examiner’s amendment, which led to allowance. *See id.*, 33. The examiner’s amendment added, to claim 1, the limitation of “upon failing to locate an identified product of the set of one or more goods” (discussed below, in §VI) and the concept of a “replacement” product, as well as other limitations to claims 1 and 14. *Id.*, 23-

32. Although the examiner did not indicate the basis for the examiner's amendment, the added subject matter was similar to subject matter recited in original claim 16 filed with the '133 application. *See id.*, 320.

The examiner's reasons for allowance stated: "[t]he allowable features include the combination of features beginning with 'upon failing to locate an identified product of the set of one or more goods' through 'upon receiving approval of the purchase from the customer, acquiring the replacement product, from the agent.'" *Id.*, 30. The examiner noted that "this combination of steps is considered non-obvious for similar reasons as in...patent 10,628,835." *Id.* The '835 patent claims, however, do not recite the idea of failing to locate the identified product or acquiring a replacement product. *See* Ex.1025. The '465 patent subsequently issued on February 1, 2022.

As illustrated in this petition, the challenged claims' limitations, including the limitation of "upon failing to locate an identified product of the set of one or more goods," were already known in the art, particularly in light of the '465 patent's correct priority date. Accordingly, the Examiner erred in allowing the '465 patent.

VI. PRIORITY DATE OF THE '465 PATENT

A. Legal Standards

The "effective filing date" of a claim is determined as of "the filing date of

the earliest application for which the patent or application is entitled, as to such invention, to a right of priority under section 119, 365(a), 365(b), 386(a), or 386(b), or to the benefit of an earlier filing date under section 120, 121, 365(c), or 386(c).” 35 U.S.C. §100(i)(1)(B). Entitlement to the benefit of an earlier date under §§119, 120, 121, and 365 is premised on disclosure of the claimed invention “in the manner provided by § 112(a) (other than the requirement to disclose the best mode)” in the earlier application(s). *See* 35 U.S.C. §§119(e), 120.

To satisfy §112 and show entitlement to an earlier priority date, the written description must “clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed.” *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (internal citations/quotations omitted). This standard requires evaluation of “whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Id.* In other words, “the specification must describe an invention understandable to that skilled artisan and show that the inventor actually invented the invention claimed.” *Id.* Further, “disclosure in a parent application is not sufficient if it ‘merely renders the later-claimed invention obvious...; the disclosure must describe the claimed invention with all its limitations.’” *L.A. Biomedical Research Inst. at Harbor-UCLA Med. Ctr. v. Eli Lilly & Co.*, 849 F.3d 1049, 1057 (Fed. Cir. 2017) (quoting *Tronzo v.*

Biomet, Inc., 156 F.3d 1154, 1158 (Fed. Cir. 1998)). The purpose of the written description requirement “is to prevent an applicant from later asserting that he invented that which he did not.” *Amgen Inc. v. Hoechst Marion Roussel Inc.*, 314 F.3d 1313, 1330 (Fed. Cir. 2003).

The ’465 patent is thus only entitled to the priority of its ancestor applications if those ancestor applications contain written description support for the ’465 patent’s claims. *See Paice, LLC v. Ford Motor Co.*, 881 F.3d 894, 906 (Fed. Cir. 2018) (“For claims to be entitled to a priority date of an earlier-filed application, the application must provide adequate written description support for the later-claimed limitations.”). A priority finding requires written description in “each application in the chain” of priority; thus, “if any application in the priority chain fails to make the requisite disclosure of subject matter, the later-filed application is not entitled to the benefit of the filing date of applications preceding the break in the priority chain.” *Hollmer v. Harari*, 681 F.3d 1351, 1355 (Fed. Cir. 2012).

B. Analysis

The ’465 patent’s priority applications do not contain written description support for independent claims 1 and 14, and as a result, the challenged claims of the ’465 patent are not entitled to the priority of any ancestor application.

As noted above, the ’465 patent matured from the ’133 application, which is

a continuation of the '848 application. The '133 application and '848 parent application are substantively identical. *See* Ex.1012 (automated redline comparison of '133 application and '848 application). As detailed below, at least two limitations of each independent claim (claims 1 and 14) of the '465 patent are not supported by the '848 application's written description. And while the '848 application claims priority to earlier applications, a showing that the '848 application does not support the '465 patent claims is sufficient to demonstrate that the '465 patent is not entitled to any earlier priority date. *See Hollmer*, 681 F.3d at 1355 (failure of one application in the priority chain to provide written description destroys priority entitlement to any earlier application). Thus, because the '848 application fails to provide written description support for the '465 patent's independent claims, the independent claims, and all claims that depend thereon (i.e., all claims of the '465 patent), are not entitled to claim the benefit of the '848 application's filing date.

1. The Parent Application Does Not Support “*failing to locate an identified product of the set of one or more goods*” (claim 1) or “*determining that the identified product is not available*” (claim 14)

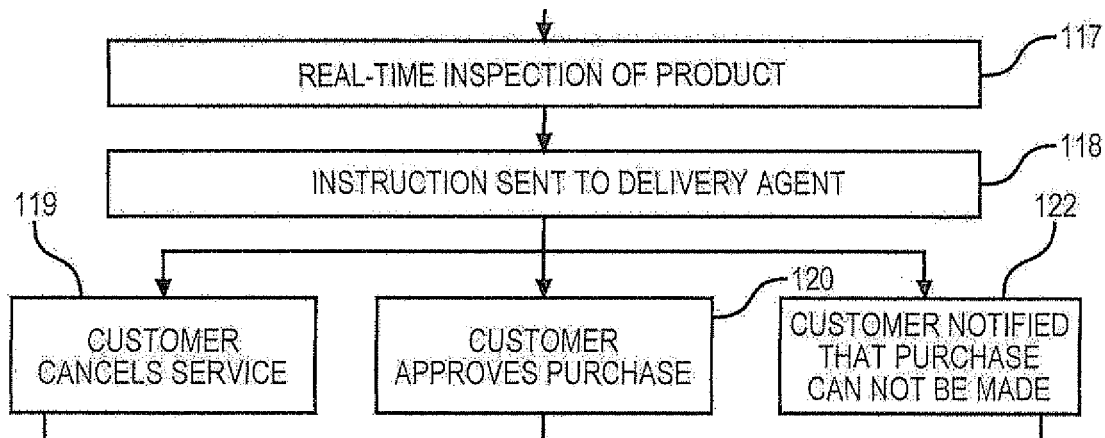
Independent claim 1 of the '465 patent recites, *inter alia*: “*upon failing to locate an identified product of the set of one or more goods, electronically transmitting information on a replacement product for the identified product of the*

set of one or more goods to the customer using the digital image capture device of the agent.” Independent claim 14 similarly recites, *inter alia*, “*determining that the identified product is not available.*” These limitations are not disclosed by, or reasonably conveyed by, the ’848 parent application.

The ’848 application does not describe a scenario corresponding to “*failing to locate an identified product of the set of one or more goods*” or “*determining that the identified product is not available.*” Instead, the ’848 application assumes that products ordered by the customer are available and does not contemplate scenarios in which the products are unavailable or contemplate what actions to take in such an event.

The ’848 application describes a method where a customer may enter “the address of a store where a desired product is being sold” (Ex.1011, ¶17) and specify “the exact location from which the selected delivery agent is to purchase or otherwise acquire the product, such as a retail store location.” *Id.*, ¶18. After selecting a store, “the selected delivery agent travels to the store location...and **finds the desired product** to be acquired.” *Id.*, ¶23. After the delivery agent locates the product, the customer optionally inspects the product at step 118, and “the customer either approves or rejects acquisition.” *Id.*, ¶24. This is reflected in Figure 3, reproduced in part below, where—after inspection of the **located product** at step 117—the customer may (i) cancel the service in option 119, (ii)

approve the purchase in option 120, or (iii) be notified that the purchase of the located product cannot be made in option 122.

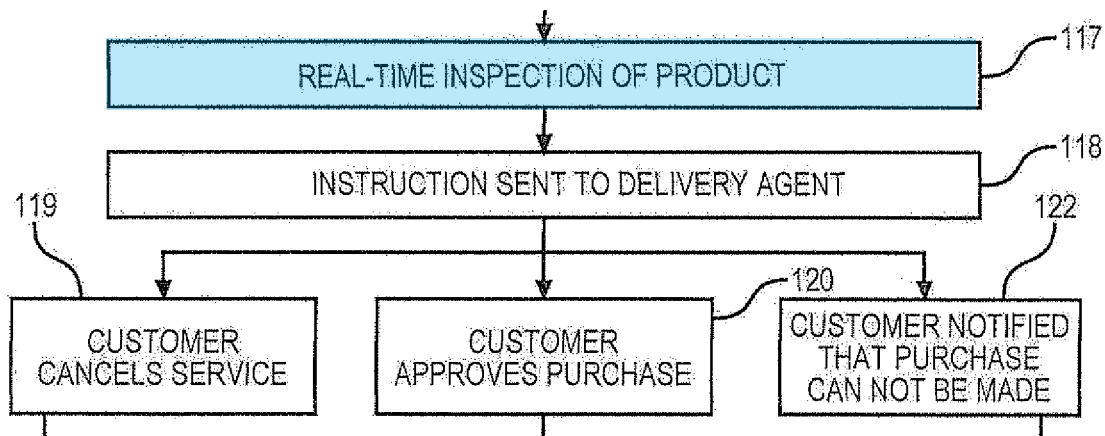


'848 application, Fig. 3 (excerpt)

The disclosure thus makes clear that the underlying premise to Figure 3, and the application as a whole, is that the product ordered by the customer **can be located** and **is available for inspection** (step 117). Ex.1003, ¶¶46-53. But this is at odds with the claims, which require “*failing to locate an identified product*” or “*determining that the identified product is not available.*”

With respect to the third option in Figure 3 (i.e., step 122, notifying the customer that the purchase cannot be made), the '848 application contemplates a situation in which “the delivery agent cannot complete the transaction for any reason.” Ex.1011, ¶25. However, product unavailability is not a reason the delivery agent cannot complete the transaction, because the product has already been located and inspected prior to step 122, as is readily apparent from Figure 3.

Specifically, reading into the '848 application a disclosure of product unavailability as a reason the delivery agent cannot complete the transaction would conflict with Figure 3, which requires (in step 117, before step 122) a step of “real-time inspection of product” **before** any indication that the delivery agent cannot complete the transaction occurs. Ex.1011, Fig. 3. If the product is inspected, it has been located and is available, and there must be some other reason the transaction cannot be completed. Ex.1003, ¶¶54-59. Step 122 is thus only related to the act of purchasing an **already-identified, located, and available** product; step 122 does not disclose product unavailability as a reason a transaction cannot be completed.



'848 application, Fig. 3 (excerpt, annotated)

Although not expressly depicted in Figure 3, the '848 application also states that the “customer either approves or rejects acquisition of the inspected product” and if “the product is rejected, the customer has the choice of inspecting another product or terminating the service.” Ex.1011, ¶24. But this scenario again only

occurs **after** “the inspected product” is available and found by the delivery agent, and the agent has transmitted “real-time data to customer computer 30.” Ex.1011, ¶¶24, 23. Thus, as this scenario again depends on the “identified product” being located or available, but ultimately rejected, it does not provide written description for “*failing to locate an identified product*” or “*determining that the identified product is not available.*” Ex.1003, ¶¶54-59.

Further, the ’848 application fails to elaborate on the myriad reasons why a transaction cannot be completed beyond when a “purchase price is outside of the pre-approved credit limit.” Ex.1011, ¶25. Aside from the disclosed credit limit scenario, a POSITA would have recognized numerous additional reasons why a transaction could not be completed. For example, the delivery agent may become suddenly unavailable, the store could decide to not allow the delivery agent to purchase the goods, or the delivery agent’s payment method could be faulty independent of the customer’s credit limit. None of these possibilities are disclosed by the ’848 application, and these scenarios are unrelated to the product requested by the user. Thus, the possibility that a product **cannot be located** or is **unavailable** is not contemplated by the ’848 application, and is not disclosed as a reason the purchase cannot be made. Ex.1003, ¶60.

While in hindsight, it may be apparent that a transaction cannot be completed because a requested product is unavailable, such an analysis would be

legally incorrect, as it is improper to “[w]ork[] backward from a knowledge of the claims” to derive written description. *Novozymes A/S v. DuPont Nutrition Biosciences APS*, 723 F.3d 1336, 1349 (Fed. Cir. 2013). Further, entitlement to a filing date “extends only to that which is disclosed,” **not** what would be obvious over what is disclosed. *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1571-72 (Fed. Cir. 1997). Thus, even in light of “the existing knowledge in the particular field, the extent and content of the prior art, the maturity of the science or technology, and the predictability of the aspect at issue,” the ’848 application does not disclose any scenario corresponding to product unavailability. *Ariad*, 598 F.3d at 1351. Rather, the absence of disclosure, and conflict with the specification, demonstrates that, as relevant to the claims, the ’848 application does not contemplate that a transaction cannot be completed, or that a purchase cannot be made, based on a failure to locate a product or based on unavailability of a product, as claims 1 and 14 require.

Thus, the ’848 application does not contemplate, or reasonably convey to a POSITA, “*failing to locate an identified product of the set of one or more goods*” (claim 1) or “*determining that the identified product is not available*” (claim 14) and accordingly, at least these limitations are not supported by the ’848 application, and the challenged claims of the ’465 patent are not entitled to claim the benefit of the ’848 application’s filing date.

2. The Parent Application Does Not Support “*determining the information from the bar or QR code, wherein the information includes at least one image of the replacement product*” (claim 1) or “*obtaining a bar code [or] QR code of a replacement product...sending to the customer the information determined from the bar code or QR code...wherein the information includes at least one image of the replacement product*” (claim 14)

In addition to the above written description failure, the '848 application fails to disclose “*determining the information from the bar or QR code, wherein the information includes at least one image of the replacement product*” as recited in claim 1. Similarly, the '848 application does not disclose “*electronically transmitting information to the customer...including: obtaining a bar code [or] QR code of a replacement product for the identified product...sending to the customer the information determined from the bar code or QR code...wherein the information includes at least one image of the replacement product*” as recited in claim 14.

First, as discussed above, the '848 application does not contemplate failing to locate a product and is thus also silent as to a “replacement product” for a product that could not be located. On that basis alone, the '848 application fails to provide support for these additional limitations requiring a replacement product for an unavailable product.

Beyond that, the '848 application also fails to support the idea of determining images from a bar or QR code. The '848 application generally

describes that “product data can be collected by scanning a bar code associated with the product, or perhaps a QR code.” Ex.1011, ¶23. The ’848 application also generally notes that when a customer initially creates a shopping list, the customer may send “information regarding the product such as pictures, bar codes, QR codes, video, [and] instructions.” *Id.*, ¶29. The only other mention of bar or QR code data is in the final catch-all paragraph of the application. *Id.*, ¶30 (“various forms for data transmission and communication” are disclosed including “still images...streaming video...bar code data and QR data”). However, the ’848 application does not contemplate determining, using a bar code or QR code, **image information from the code**. That is, the ’848 application does not contemplate the use of a bar or QR code to retrieve **image information** from the bar or QR code as claims 1 and 14 recite.

Instead of disclosing such a relationship, bar/QR code data and images appear to be separate concepts or options. For example, in one passage quoted above, the ’848 application lists “pictures, bar codes, QR codes” as alternative types of product data. *Id.*, ¶29; *see also* cl.28 (“product data is in the form of images, video, bar codes, QR codes, image recognition and near field communication data.”). Likewise, the ’848 application contemplates creating an e-shopping list “by scanning bar codes on existing products which the customer wants replaced, **or** taking a visual image in combination with image recognition

software.” *Id.*, ¶29. Similarly, the ’848 application explains that “bar code and QR code data...enabl[e] a host of information related to the product to be presented, e.g., nutritional or health information, product ratings and the like,” but not images. *Id.*, ¶30; *see also* ¶8 (“digital pictures or video can be taken and used to communicate the product to the customer. **On the other hand**, bar codes, QR (Quick Response) codes...can be used in identifying and communicating information.”). Here, and throughout the ’848 application, bar/QR codes are one method of sending product information to a consumer (e.g., product name, nutritional information, etc.), and images are another method. But there is no disclosure bridging the two concepts, i.e., no disclosure that contemplates using a bar/QR code to obtain an image, and sending that obtained image information to the user. Ex.1003, ¶¶62-75.

The absence of disclosure in the ’848 application that a bar/QR code of a product is used to obtain product image information is consistent with the disclosed embodiments, and in fact, using bar/QR code data to obtain product image information is arguably inconsistent with the disclosed embodiments. The ’848 application purports to solve issues present in “internet shopping” and, in particular, internet-based pictures that are “inadequate to accurately depict the item” selected by a customer. Ex.1011, ¶4. Such “inadequate” images on internet shopping sites would typically be static, previously stored images (e.g., in a

database), just like images obtained using a bar/QR code scan. Ex.1003, ¶¶76-77.

The '848 application purports to solve this issue by instead having an agent capture and transmit “real-time” pictures and video of a product in a store to a customer for inspection. Ex.1011, ¶23. Sending a customer a static image of a replacement product from a database is inconsistent with the alleged solution of the '848 application, as such a static picture would not allow for customer inspection of the replacement product, but instead would be the same type of potentially “inadequate,” static image that the '848 application attempts to improve upon. Ex.1003, ¶¶76-77.

Accordingly, the limitations of claims 1 and 14 requiring image information of a replacement product to be determined from a bar or QR code, are not disclosed by the '848 application, and are not reasonably conveyed to a POSITA reading the disclosure. Ex.1003, ¶¶62-78.

Thus, for this second independent reason, the '848 application does not provide written description support for the independent claims, and the challenged claims of the '465 patent are not entitled to claim the benefit of the '848 application's filing date.

C. Priority Date Conclusion

Because multiple limitations of the '465 patent's challenged independent claims do not have written description support in the ancestor '848 application, the

applicable priority date for the challenged claims of the '465 patent is no earlier than the filing of the '133 application, i.e., April 20, 2020.¹

VII. LEVEL OF ORDINARY SKILL IN THE ART

A Person of Ordinary Skill in The Art (“POSITA”) in August 2009 (the earliest alleged priority date) or April 2020 (the applicable priority date) would have been someone knowledgeable and familiar with the electronic commerce arts that are pertinent to the '465 patent. That person would have a bachelor’s degree in electrical engineering, computer engineering, computer science, or equivalent training, and approximately two years of experience working in the field of electronic commerce. Lack of work experience can be remedied by additional education, and vice versa. Ex.1003, ¶¶22-25.

¹ Petitioner does not concede that the '465 patent’s claims are supported by the written description of the '133 application. Indeed, the specification of the '133 application is substantively identical to the '848 application specification. *See* Ex.1012.

VIII. CLAIM CONSTRUCTION

For purposes of this proceeding, the terms of the Challenged Claims should be given their ordinary and customary meaning.² *See* 37 C.F.R. §§42.100(b), 42.104(b)(3) (petition need only set forth “how the challenged claim is to be construed”); Ex.1003, ¶83. For completeness, Petitioner addresses one claim term, but as detailed below, construction is unnecessary to resolve patentability.

A. “*mobile agent system*”

In district court litigation involving related patents, the court construed the term “*mobile agent system*” as “a mobile system that includes at least a device to capture video or still images and a device set up to communicate with a remote server.” Ex.1013, 1. Adoption of this construction in this proceeding is unnecessary to resolve patentability, as each independent claim explicitly recites that the claimed “*mobile agent system*” includes “*a digital image capture device and a communication device.*” *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017).

² Petitioner does not concede that any term in the Challenged Claims meets the statutory requirements of 35 U.S.C. §112, or that the Challenged Claims recite patentable subject matter under 35 U.S.C. §101.

IX. RELIEF REQUESTED AND THE REASONS FOR THE REQUESTED RELIEF

Petitioner asks that the Board institute a trial for *inter partes* review and cancel the Challenged Claims in view of the analysis below.

X. IDENTIFICATION OF HOW THE CLAIMS ARE UNPATENTABLE

A. Challenged Claims

Petitioner challenges all claims 1-19.

B. Statutory Grounds for Challenges

Grounds	Claim(s)	Basis
#1	1, 4-5, 8-9, 11-12, 14, 16-17	§ 103 Carr and Lauka
#2	2-3, 10, 15	§ 103 Carr , Lauka and Yee
#3	6-7	§ 103 Carr , Lauka , and Cincotta
#4	13	§ 103 Carr , Lauka , and Argue
#5	18-19	§ 103 Carr , Lauka , and Dearing

Carr (Ex.1005) published May 26, 2016 and is prior art under 35 USC §102(a)(1)–(2). **Lauka** (Ex.1006) was filed June 24, 2016 and issued March 17, 2020 and is prior art under 35 USC §102(a)(1)–(2). **Yee** (Ex.1007) was filed December 11, 2019 and is prior art under 35 USC §102(a)(1). **Cincotta** (Ex.1008) published April 4, 2013 and is prior art under 35 USC §102(a)(1)–(2). **Argue** (Ex.1009) published May 29, 2014 and is prior art under 35 USC §102(a)(1)–(2).

Dearing (Ex.1010) was filed July 20, 2012 and issued December 17, 2019 and is prior art under 35 USC §102(a)(1)–(2).

Petitioner’s analysis also cites additional prior art to demonstrate the background knowledge of a POSITA and to provide context to support Petitioner’s assertions regarding what a POSITA would have understood. *See Yeda Research & Dev. Co. v. Mylan Pharm. Inc.*, 906 F.3d 1031, 1041-1042 (Fed. Cir. 2018); 37 C.F.R. §42.104(b); *see also K/S HIMPP v. Hear-Wear Techs., LLC*, 751 F.3d 1362, 1365-66 (Fed. Cir. 2014).

C. Ground 1: Claims 1, 4-5, 8-9, 11-12, 14, and 16-17 are obvious under § 103 over Carr in view of Lauka.

1. Summary of Carr

Carr teaches “[t]echniques for allowing a customer to order goods on-line or remotely” and specifically addresses the situation in which “one or more of the goods in the customer order are unavailable.” Ex.1005, Abstract. In Carr’s method, when a product in the customer’s order is unavailable, “a list of alternative goods” is established with “associated images and/or other information” and communicated to the customer, and the customer may “choose one of the alternative goods as a substitute good.” *Id.*, Abstract, ¶96. In Carr, a “store employee or assembler may use an assembler device 36, such as a handheld computer device, 36, while collecting items for the customer orders.” *Id.*, ¶86. The

“handheld device 36 may perform several functions” including “scan[ning] the item UPC code.” *Id.*, ¶¶86-87. Images of the alternative goods presented to the customer are retrieved based on the scanned UPC codes. *See id.*, ¶¶95-96.

2. Summary of Lauka

Lauka discloses online “order fulfillment” and, like Carr, addresses the instance “[w]hen ... substitutions are required, due to unavailability of particular products.” Ex.1006, Abstract. Lauka discloses fulfilling orders with “a plurality of workers, called ‘pickers’ 104, each with a handheld electronic device 106.” *Id.*, 3:11-18. The handheld device can “comprise a smart phone” and may use the “smart phone’s existing camera...along with the appropriate software to provide the functionality of the imaging device 206 and/or the scanner 208” of reading or interpreting “2D or 3D bar codes, universal product codes (UPC).” *Id.*, 3:29-4:19.

3. Reasons to Combine Carr and Lauka

For the reasons set forth below, a POSITA would have been motivated to combine the teachings of Carr with those of Lauka. Ex.1003, ¶¶89-96. It would have been obvious, beneficial, and predictable to apply Lauka’s teaching of a picker using a “smart phone” to assemble an order to Carr’s similar method, which likewise uses an employee handheld device. This combination would achieve the benefits disclosed by Lauka, which describes that using a smartphone as a picker device eliminates the requirement for a “dedicated handheld electronic device.”

Ex.1006, 4:8-19; Ex.1003, ¶89.

A POSITA, when considering the teachings of Carr, would have also considered the teachings of Lauka. Ex.1003, ¶90. Both Carr and Lauka relate to electronic commerce, and specifically to the delivery of goods ordered over the internet. Ex.1005, Abstract; Ex.1006, Abstract. As such, both Carr and Lauka are analogous art to the '465 patent. *See, e.g.*, Ex.1001, 1:29-31.

Carr discloses that “a store employee or assembler may use an assembler device 36, such as handheld computer device, 36 while collecting items for the customer orders.” Ex.1005, ¶86. Carr specifically discloses that the “employee may use a scanner 74 on the handheld device 36 to scan the item UPC code” and that “handheld device 36 may also include a communications device.” *Id.*, ¶¶87-88. However, Carr does not explicitly disclose that the scanner of the “handheld computer device” is a camera or image capture device.

A POSITA would have recognized at the time of the '465 patent that image capture devices, and specifically, image capture devices included within handheld computing devices (e.g., smartphones) were increasingly being used as barcode scanners. For example, as detailed above, Lauka explicitly teaches that a “smart phone’s existing camera” could be used to provide the functionality of a barcode scanner. *See* Ex.1006, 3:29-4:19. And, Lauka provides an explicit motivation for doing so: using a smartphone as a barcode scanner eliminates the need for a

“dedicated” handheld electronic device, which would have motivated a POSITA to use a smartphone as a barcode scanning device. *See id.*; Ex.1003, ¶¶91-92.

A POSITA would have recognized additional benefits of utilizing a smartphone’s existing camera, as Lauka teaches, and a smartphone more generally, in the context of Carr’s teachings of a handheld device 36. For example, industry research acknowledged that “the laser barcode scanner has one deficiency...lack of mobility” and thus proposed using an iPhone “as a mobile platform for decoding barcode rather than the use of the conventional scanner.” Ex.1003, ¶93 (citing Ex.1015). Consistent with this industry research, a POSITA would have recognized that dedicated barcode scanning devices did not have a form factor that would allow for carrying in a store employee’s pocket, in contrast to a smartphone, which could easily be placed into an employee’s pocket. Ex.1003, ¶94; *compare, e.g.*, Ex.1006, Fig. 2 (showing a traditional barcode scanner) with Fig. 7 (showing form factor of typical smartphone). Using a device with greater mobility or portability, like a smartphone, would have improved Carr’s methods, because in Carr, the “assembler traverses the facility or store in order to find and place into a bin the goods for the order” (Ex.1005, ¶104); given the need for the employee to move throughout the store, increasing the portability of the assembler’s device as Lauka teaches would have been beneficial (e.g., the assembler could carry items in their hands while the assembler device resided in the assembler’s pocket), and thus

a POSITA would have been motivated to incorporate these teachings of Lauka. Ex.1003, ¶94.

A POSITA would have also had a reasonable expectation of success in combining these teachings. Specifically, given the close overlap between the methods of Carr and Lauka, a POSITA would have expected success implementing Lauka’s technique meant for remote shopping in Carr, which likewise deals with remote shopping. Ex.1003, ¶95. Further, Lauka acknowledges using a smartphone’s camera as a barcode scanner was known, and contemporaneous research confirms that it was possible and predictable to utilize a smartphone’s camera to do so. Indeed, well-before the ’465 patent’s priority date, researchers acknowledged “the availability of high performance barcode scanner apps” for smartphones. Ex.1003, ¶95 (citing Ex.1016). Additionally, a POSITA would have recognized that combining the teachings would have not changed the intended functionality of Carr; rather, the combination merely changes the formfactor of Carr’s handheld device. Ex.1003, ¶95.

Accordingly, a POSITA would have found it obvious to apply Lauka’s teachings to Carr’s handheld electronic device because the combination merely amounts to the simple substitution of one known element (a smartphone) for another (Carr’s handheld barcode scanner) to yield a predictable result. Ex.1003, ¶¶89-96.

4. Claim 1

[1.0.1] *A method for remote acquisition and delivery of goods through one or more agents of a service provider,*

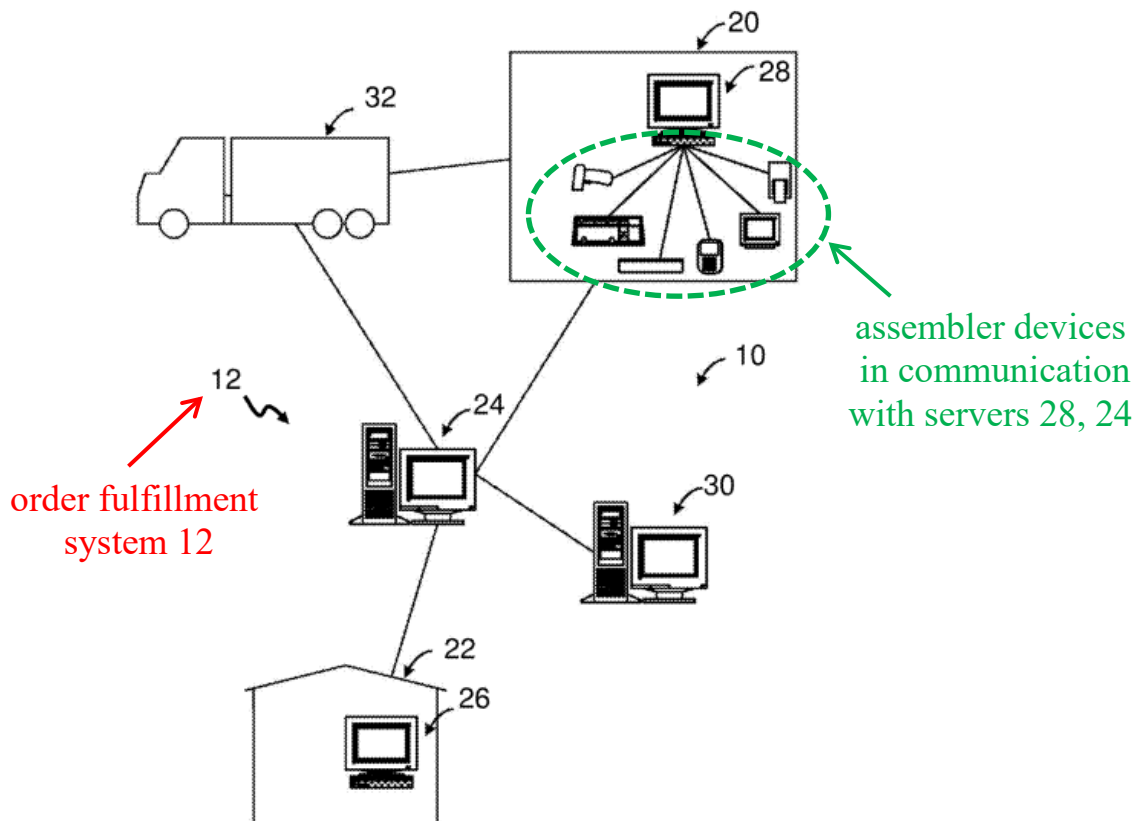
In Carr, “a customer may order goods on-line or remotely and...have the goods in the order delivered to the customer.” Ex.1005, ¶¶40, 2, Abstract. Carr’s delivery service is provided through a “store” or “plurality of stores” that “may be representative of a larger corporate environment which may provide many avenues of interface with a customer” (“*service provider*”). *Id.*, ¶¶42-43. An “assembler” (“*agent*”)—for example, a store employee³—“may collect items throughout the store 20 and arrange for those items to be assembled and ready for delivery to one or more customer locations.” *Id.*, ¶¶53, 41. Carr’s solution uses an “order fulfillment system [that] assists an assembler in assembling the customer order for the customer.” *Id.*, ¶6.

Thus, Carr’s methodology that allows customers to remotely order goods for assembly and delivery through assemblers of a store delivery service provider renders obvious this limitation. Ex.1003, ¶¶97-100.

[1.0.2] *each agent having a mobile agent system in communication with at least one remote server,*

³ Dependent claim 8 recites: “*wherein the one or more agents is part of staff at an establishment which sells the first set of one or more goods.*”

Carr teaches that the “**store employee or assembler** may use an **assembler device**, such as handheld computer device, 36 while collecting items for the customer orders.” Ex.1005, ¶86. Carr’s handheld device 36 includes a “communication device 116” that “allows the handheld device 36 to communicate with another device, e.g., the first server 24, the second server 28 or the order fulfillment system 12” (“*in communication with at least one remote server*”). *Id.*, ¶122. For example, “handheld device 36 may communicate with the second server 28 to receive a list of items which need to be collected from the store 20 to fulfill the orders.” *Id.*, ¶86.



Ex.1005, Fig. 1 (annotated)

Thus, Carr’s store employees/assemblers using handheld computer devices which communicate with the first and second servers, render obvious this limitation. Ex.1003, ¶¶101-104.

[1.0.3] *with each mobile agent system including: a digital image capture device and a communication device, said method comprising:*

Carr teaches that “each handheld device 36 includes a Universal Product Code (UPC) scanner.” Ex.1005, ¶¶74, 94. In view of the teachings of Lauka, a POSITA would have recognized that it was obvious to implement the UPC scanner functionality of Carr’s handheld device using an “imaging device” such as that taught by Lauka, which specifies that the “imaging device 206 can comprise a video or still camera” and “can be used to capture images.” Ex.1006, 3:49-57; Ex.1003, ¶¶105-107. In particular, Lauka teaches a “handheld electronic device 106” that is similarly used by agents within a store to gather items for a customer order, where the handheld device can “comprise a smart phone” such that **“the smart phone’s existing camera” can “provide the functionality” of barcode scanning.** Ex.1006, 3:19-28, 4:10-21; Ex.1003, ¶107.

Carr also teaches that its “handheld device 36 may also include a communications device to permit the handheld device 36 to communicate.” Ex.1005, ¶¶88, 122.

Thus, the combined teachings of Carr and Lauka render obvious this

limitation. Ex.1003, ¶¶105-109.

[1.1] *receiving, through the at least one remote server, a first acquisition request from a customer for a first set of one or more goods;*

Carr’s method “includes the step of **receiving a customer order** at an order fulfillment system,” and it states that the “**customer order includes at least one good.**” Ex.1005, ¶9. Carr further teaches that “the customer order is received at the first server 24...from an external system” and, after a “customer completes an order, the order information pertaining to that order may be sent to the second server 28.” *Id.*, ¶¶73, 60, Fig. 1.

Thus, Carr’s teaching of the first and second servers receiving an order with at least one good renders obvious this limitation. Ex.1003, ¶¶110-112.

[1.2] *contacting, through the communications device, the one or more agents;*

Carr teaches that the “second server 28 may communicate with...an assembler device, such as a store handheld device, 36.” Ex.1005, ¶57. The “second server 28 **provides a list of the goods in the order...to one or more employees of the store 20**” through the assembler’s handheld device.” *Id.*, ¶74.

Thus, Carr’s disclosure of the servers communicating orders to the handheld devices renders obvious this limitation. Ex.1003, ¶¶113-115.

[1.3] *upon failing to locate an identified product of the set of one or more goods, electronically transmitting information on a replacement product for the identified product of the set of one or more goods to the customer using the digital image capture device of the agent, including:*

Carr “addresses the situation in which **one or more of the goods in the customer order are currently unavailable**....In some situations, the selected store or facility may not have or may be out of stock of a particular good.”

Ex.1005, ¶90, ¶107 (explaining the “assembler may scan the UPC goods or items that are substitutes for the unavailable good” confirming that the assembler fails to locate the unavailable good). Thus, Carr teaches “*failing to locate an identified product of the set of one or more goods*”, because a POSITA would have recognized that, when an item (“*an identified product*”) is out of stock, an order assembler would “*fail[] to locate*” the item. Ex.1003, ¶¶116-117.

Carr further teaches “allowing the assembler to establish, using the assembler device 36, a list of substitute goods, if one of the at least one good is not available at the facility.” Ex.1005, ¶¶105, 95. Specifically, Carr teaches that “the assembler may **establish the list of goods by using the UPC reader 74** to read the UPC of the goods the assembler has chosen to include.” *Id.*, ¶95. Carr then states that “the list of substitute goods, including the images and/or other information, is sent...to the customer device.” *Id.*, ¶96. Thus, Carr teaches “*electronically transmitting information on a replacement product for the identified product of the set of one or more goods*” (the substitute goods and information) “*to the customer using the digital image capture device of the agent*” (using a smartphone’s image capture device operating as a UPC scanner in the combined Carr-Lauka teachings)

as recited. Ex.1003, ¶118.

Thus, the combined teachings of Carr and Lauka render obvious this limitation. *Id.*, ¶¶116-119.

[1.4] *obtaining a bar or QR code of the replacement product;*

Carr teaches that, when a particular item is not available, “the assembler may establish a list of substitute goods...by using the UPC reader 74 to **read the UPC** of the goods the assembler has chosen to include” in the list of substitute goods. Ex.1005, ¶95, *see also* ¶107 (“scanning or reading the UPC code of a chosen potential substitute good or items”). A POSITA would have recognized a “UPC code” as teaching the use of a “*bar...code*” as recited, as a dictionary defines “Universal Product Code” as the “more formal term for BARCODE.” Ex.1017, 1943; Ex.1003, ¶¶120-121.

Thus, Carr’s teaching of scanning a UPC code for a substitute good renders obvious this limitation. Ex.1003, ¶¶120-122.

[1.5] *determining the information from the bar or QR code, wherein the information includes at least one image of the replacement product; and*

As detailed above, Carr teaches that “the assembler may establish the list of goods by using the UPC reader 74 to read the UPC of the goods the assembler has chosen to include.” Ex.1005, ¶95. Carr further teaches that, as part of establishing the list of substitute goods using UPCs, associated images of the goods are

retrieved from a database and transmitted to the customer:

[T]he database 42, 44 may include images and/or other information related to the goods available at the facility. **When the list of substitute goods is established** [using UPCs], the list of substitute goods, **along with the associated images and/or other information**, e.g., nutritional information, may be communicated to the customer (see below).

Id., ¶96. To facilitate this retrieval of item information, Carr teaches that the database associates the UPC of an item with the item's information. *Id.*, ¶116 (“item database 104 stores item information associated with items or types of items in the store 20. For example, the item database 104 may store identification codes, Universal Product Codes (UPC) codes, item location in the store 20, as well as other information associated with the items. By way of example, the item database 104 may be queried by the processing device 90 and may transmit information to the processing device to facilitate the use of item data.”). Accordingly, Carr teaches using the scanned UPC code to retrieve, or determine, from the database, associated images and/or other information for the list of substitute goods. Ex.1003, ¶¶123-126.

This use of barcodes was known at the time of the '465 patent⁴; for example, Du disclosed a method where a user “operates a portable imaging device to capture an image of identifying data, such as a bar code, that identifies a selected item” and subsequently may “obtain item information (e.g., price, availability, etc.) associated with the selected item.” Ex.1020, Abstract, *see also* Figs. 3, 4a-4b; Ex.1003, ¶126.

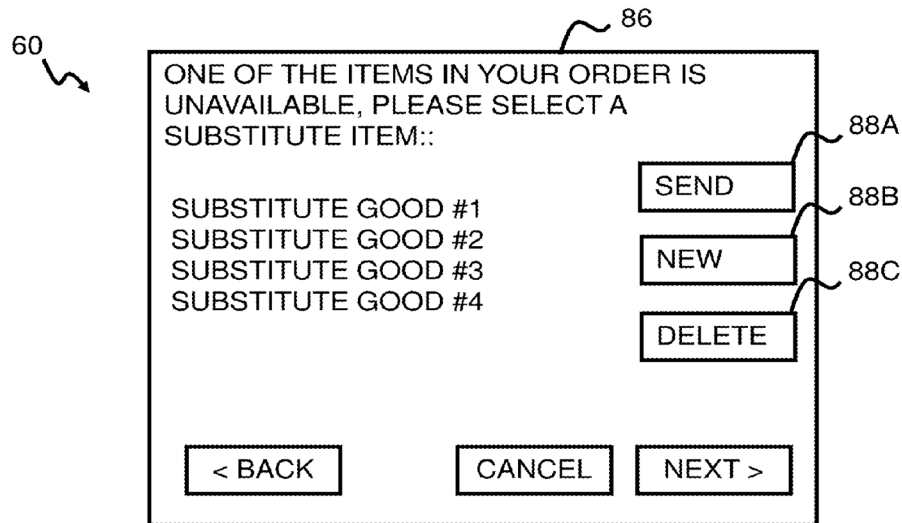
Thus, retrieving a substitute good’s information using its UPC, wherein the information includes an image of the substitute good, as taught by Carr, renders obvious this limitation. Ex.1003, ¶¶123-127.

[1.6] *sending the information for the customer to approve the purchase of the replacement product based on the information determined from the bar or QR code; and*

Carr teaches that “**the list of substitute goods, including the images and/or other information, is sent** from the order fulfillment system 12, through the first or order server 24 **to the customer device 26.**” Ex.1005, ¶96, *see also* ¶97 (“list of substitute goods may then be communicated to the customer and the

⁴ Background knowledge of a POSITA cannot be leveraged to gap-fill absence of written description support for this limitation in the '848 application (*see supra* §VI.B.2). *See Rivera v. ITC*, 857 F.3d 1315, 1322 (Fed. Cir. 2017) (knowledge of a POSITA cannot be used to teach limitations that are not in the specification).

customer allowed to choose one of the goods to be included in the order”), ¶¶98-99, ¶51 (“items...for purchase”).



Ex.1005, Fig. 12

Thus, Carr’s teaching of sending the list of substitute goods, including images derived from scanning the UPC, to the customer device for the customer to choose one of the goods, renders obvious this limitation. Ex.1003, ¶¶128-130.

[1.7] upon receiving approval of the purchase from the customer, acquiring the replacement product, via the agent.

After the list is sent, Carr teaches that it “allows the customer to **select one of the substitute goods as the alternative good.**” Ex.1005, ¶99. The customer’s selection of one of the substitute goods as the alternative good teaches “*approval of the purchase from the customer.*” Ex.1003, ¶¶131-132. Carr then teaches that “[t]he alternative good is communicated back to the assembler” and the “assembler

includes the alternative good in the customer order” and thus teaches “*upon receiving approval...acquiring the replacement product, via the agent.*” Ex.1005, ¶101.

Thus, Carr renders obvious this limitation. Ex.1003, ¶¶131-133.

The combined teachings of Carr and Lauka, in view of the above-described motivation to combine, therefore render obvious each and every limitation of claim 1.

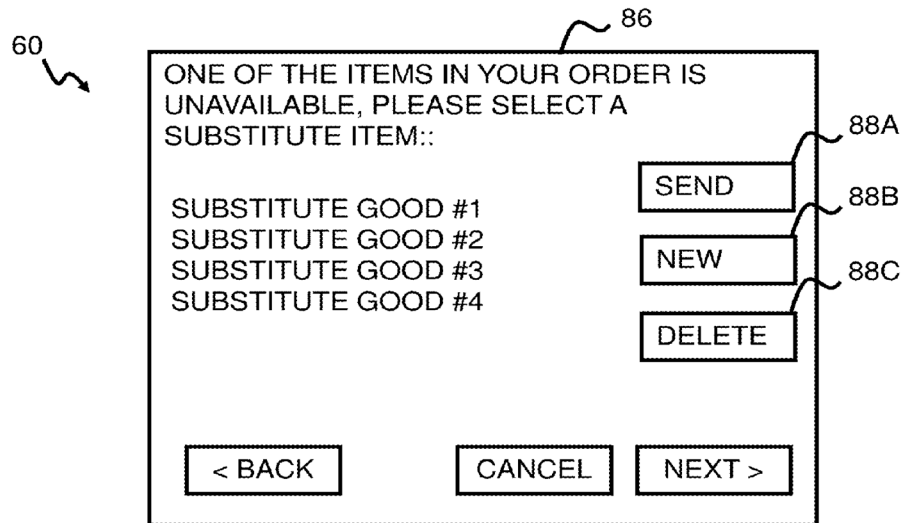
5. Claim 4

[4.1] *The method of claim 1, further comprising: obtaining consent from the customer to acquire the identified product⁵ using the communication device;*

Carr teaches that, in a “dialog box 86, the **list of substitute goods may be displayed and the customer prompted to select one of the substitute goods** on the list as the alternative good. Once selected, the customer may **send the chosen alternative good back to the assembler by selecting a SEND button 88A.**”

⁵ Because “*the identified product*” in claim 1 is the product that is not located, and a replacement product is instead included within the customer’s order, Petitioner interprets this language as referring to consent to acquire the replacement product. Ex.1003, ¶134. If this language is interpreted otherwise, an alternative claim mapping is also provided below.

Ex.1005, ¶108. As discussed above, the assembler receives communications with their handheld device 36 (“*communication device*”). *Id.*, ¶¶74, 104, 110, 122.



Ex.1005, Fig. 12

Carr also teaches that its system obtains consent from the customer to acquire products when the customer submits an order. For example, Carr’s method “includes the step of **receiving a customer order** at an order fulfillment system” and states that the “**customer order includes at least one good**,” where the order is transmitted to the assembler’s handheld device 36. *Id.*, ¶¶9, 47-48, 74.

Thus, Carr’s teaching of receiving the customer’s selection of a substitute good and sending the chosen good to the assembler’s device, and Carr’s teaching of receiving a customer order of a specific good and transmitting the order to an assembler’s device, renders obvious this limitation. Ex.1003, ¶¶134-137.

[4.2] acquiring the identified product, via the one or more agents; and

Carr teaches that “the assembler **retrieves the substitute good** and places the substitute good in the bin” and thus renders obvious this limitation. Ex.1005, ¶110; Ex.1003, ¶¶138-139.

[4.3] *providing for delivery of the identified product to a delivery site.*

Carr teaches that “a customer may use a store website or specially designed application or app 60 to order various **items for delivery to a customer location 22...**” Ex.1005, ¶76. Carr’s system provides for such delivery: “first server 24 may include software to allow delivery of items to a customer.” *Id.*, ¶¶48, 50; *see also* ¶2 (“customer may desire that the goods in the order be delivered to their home”), ¶40 (“customer may...arrange to pick-up the order at a specified location...[or] have the goods in the order delivered”), ¶44. Thus, Carr renders obvious this limitation. Ex.1003, ¶140.

8. Claim 5

[5.1] *The method of claim 1, further comprising: checking the one or more goods off an electronic shopping list in real-time as each of the one or more goods is acquired.*

In Carr, “each assembl[er] may be equipped with a handheld device 36 that provides the assembler access to the list and allows the assembler to **check off goods from the list as the goods are assembled** and placed in a bin.” Ex.1005, ¶74. Carr renders obvious this limitation. Ex.1003, ¶¶141-142.

9. Claims 8 & 11

[8.1 / 11.1] *The method of claim 1, wherein the one or more agents is part of staff at an establishment which sells the first set of one or more goods.*

Claims 8 and 11 are identical and are addressed collectively.

Carr teaches “methods and computer product media that facilitates the assembly of an order for a customer” and that the “present invention allows **an employee at the store or facility, i.e., an assembler...**” to assemble the goods.

Ex.1005, ¶41, ¶74. Thus, Carr renders obvious these claims. Ex.1003, ¶¶143-145.

10. Claims 9 & 12

[9.1] *The method of claim 8,*

[12.1] *The method of claim 11,*

[9.1 / 12.1] *wherein the one or more agents utilizes in-house gear of the establishment for the mobile agent system.*

These claims recite identical subject matter and are addressed collectively.

Carr teaches that the “assembler device” may be “a **store** handheld device, 36” and also discloses that “store 20 may include the second server 28 and **one or more handheld devices 36.**” Ex.1005, ¶¶57, 84. By describing a store handheld device, Carr renders obvious this limitation. Ex.1003, ¶¶146-148.

11. Claim 14

[14.0] *A method for remote acquisition and delivery of goods with a plurality of agents of a service provider at various geographic locations, each agent having a mobile agent system in communication with at least one remote server, wherein each mobile agent system includes a digital image capture device and a*

communication device, said method comprising:

See [1.0]. With respect to the further recitation that the agents of a service provider be “*at various geographic locations,*” Carr teaches that the assemblers (“*agents*”) may be employees of a “store 20,” where the “store 20 may include, or be part of, a plurality of stores 20” such as “brick and mortar retail locations.” Ex.1005, ¶¶42-43. Carr’s assemblers at multiple various brick and mortar retail store locations render obvious “*a plurality of agents of a service provider at various geographic locations.*” Ex.1003, ¶¶149-150; *see also id.*, ¶¶151-158 (limitations [14.1]-[14.8]).

[14.1] receiving, through the at least one remote server, a first acquisition request from a customer for an identified product in a first set of one or more goods;

See [1.1].

[14.2] contacting, through the communications device, one of the plurality of agents;

See [1.2].

[14.3] determining that the identified product is not available; and

See [1.3].

[14.4] electronically transmitting information to the customer using the digital image capture device of the agent, including:

See [1.3].

[14.5] obtaining a bar code of QR code of a replacement product for the identified product of the first set of the one or more goods; and

See [1.4].

[14.6] *sending to the customer the information determined from the bar code or QR code about the replacement product for the customer to approve the purchase of the replacement product, wherein the information includes at least one image of the replacement product;*

See [1.5]-[1.6].

[14.7] *upon receiving approval of the purchase from the customer, acquiring the replacement product, via the agent; and*

See [1.7].

[14.8] *providing for delivery of the replacement product.*

See [4.3].

12. Claim 16

[15.1] *The method of claim 14, further comprising: delivering the replacement product to a delivery site with the agent.*

See [4.3]. With respect to the further recitation that the delivery is “*with the agent,*” Carr explains that the delivery site may be a “parking spot” outside the store where the customer is parked. Ex.1005, ¶75. In this example, an “employee of the store 20” (“*agent*”) delivers the order to the parking spot delivery site. *Id.* (“system 10 may...direct an employee of the store 20...to deliver the bin(s) containing the order to the assigned parking spot”). Carr thus renders obvious this limitation. Ex.1003, ¶¶159-160.

13. Claim 17

[17.1] *The method of claim 14, wherein a cellular telephone is used for both the*

digital image capture device and the communications device.

As detailed in [1.0.2], Lauka teaches that “the handheld electronic device 106 can comprise a smart phone.” Ex.1006, 4:8-19. And as explained in §X.C.3, a POSITA would have found it obvious to utilize a smartphone as Carr’s assembler device 36, in the manner taught by Lauka. Ex.1003, ¶¶89-96. In such a combination, the assembler’s smartphone “*is used for both the digital image capture device and the communications device.*” Ex.1003, ¶161.

A POSITA would have interpreted a “smart phone” as taught by Lauka to render obvious “*a cellular telephone*” because it was common for smartphones to have cellular connectivity. Ex.1003, ¶162 (citing, e.g., Ex.1021 (“a **smart phone** is a next-generation, multifunctional **cell phone**...”). Lauka also contemplates that the “handheld electronic device 106 can...**utilize cellular location services**” and that the “handheld electronic devices 106” can be connected by a “cellular network connection,” confirming that Lauka’s smartphone renders obvious “*a cellular telephone.*” Ex.1003, ¶¶161-163 (citing Ex.1006, 4:47-50, 13:4-8).

D. Ground 2: Claims 2-3, 10, and 15 are obvious under § 103 over Carr in view of Lauka and further in view of Yee.

1. Summary of Yee

Yee describes a “system for remote shopping” that, in part “includes a wearable device worn on a remote shopping assistant.” Ex.1007, ¶3. Yee provides

a customer, or “remote shopper,” “the experience of shopping in real-time without needing to drive to the store or waiting in line to pay, and yet have control on grocery selection as well as personalizing it based on needs.” *Id.*, ¶12. Yee’s system includes a “shopping assistant 101...equipped with various equipment to help with remote shopping assistance” including “different real-time localization systems like GPS.” *Id.*, ¶¶16, 23.

2. Reasons to Combine Yee with Carr and Lauka

For the reasons set forth below, a POSITA would have been motivated to combine the teachings of Yee with the teachings of Carr and Lauka. Ex.1003, ¶¶165-170. It would have been obvious, beneficial, and predictable to apply Yee’s teachings regarding location information of a shopping assistant to the Carr and Lauka combination—for example, to provide “the experience of shopping in real-time without needing to drive to the store” as Yee provides. Ex.1003, ¶165 (citing Ex.1007, ¶12).

A POSITA, when considering the teachings of Carr and Lauka, would have also considered the teachings of Yee. Ex.1003, ¶166. Carr, Lauka, and Yee all relate to the delivery of goods ordered over the internet. Ex.1005, Abstract; Ex.1006, Abstract; Ex.1007, ¶2. As such, Yee is analogous art. *See, e.g.*, Ex.1001, 1:29-31.

A POSITA would have been specifically motivated to incorporate Yee’s

teachings because doing so would have provided additional interactivity and information to Carr’s customer that has placed an online order. Ex.1003, ¶167. Specifically, Yee’s teachings provide “periodic alerts allowing the shopper to be notified of different times that the shopping assistant may be in a specific aisle.” Ex.1007, ¶42. These features are not explicitly taught in Carr, but a POSITA would have recognized a benefit to incorporating this feature of Yee. Ex.1003, ¶167. For example, a POSITA would have recognized that a customer would appreciate the additional detail provided by location information on a shopper as the shopper travels through the store, as doing so would provide the customer with the “experience of shopping in real-time” while being at home. Ex.1007, ¶12. Thus, in one example implementation of the combination, a POSITA would have found it obvious to modify Carr’s method such that, as the “assembler traverses the facility or store in order to find and place into a bin the goods for the order,” the customer knows which goods have been obtained and which goods are still pending based on the shopper’s location in the store (as taught by Yee), providing greater detail into the shopping process than otherwise provided by Carr. Ex.1003, ¶168 (citing Ex.1005, ¶104).

A POSITA would have also had a reasonable expectation of success in the combination. Ex.1003, ¶169. The combination does not change the intended functionality of Carr, but rather adds additional communication with the customer.

Any modifications to Carr’s methods and software to accommodate Yee’s additional information would have been relatively straightforward to a POSITA, as doing so would have been well-within the level of skill in the art. Ex.1003, ¶169; *Fonar Corp. v. Gen. Elec. Co.*, 107 F.3d 1543, 1549 (Fed. Cir. 1997) (once functions of software are identified, writing code to accomplish functions is within the skill in the art).

Accordingly, a POSITA would have found it obvious to apply Yee’s teachings to Carr’s methods because the combination merely amounts to applying a known technique to a method ready for improvement. Ex.1003, ¶¶165-170.

3. Claim 2

[2.0] *The method of claim 1, wherein each mobile agent system further includes a global positioning system and*

As discussed above, the combined teachings of Carr and Lauka render obvious the “*mobile agent system*,” where Carr’s assembler device is implemented as a smartphone. Ex.1003, ¶171. Lauka further teaches a mobile agent system with “*a global positioning system*” as its “handheld electronic device 106” embodied as a smartphone “can also use the transceiver 210 to provide location services. The transceiver 210 can utilize cellular location services, for example, or **GPS** to provide location information....” Ex.1006, 4:46-63.

Thus, Lauka’s transceiver utilizing GPS in the handheld smartphone device

in view of Carr renders obvious this limitation. Ex.1003, ¶¶171-173.

[2.1] *the method further comprising: sending to the first customer, information on the plurality of agents, including location information based on signals from the global positioning devices.*

Yee teaches that “the system may also send periodic alerts allowing the shopper to be notified of different times that the shopping assistant may be in a specific aisle.” Ex.1007, ¶42. Yee elaborates and states “when the shopping assistant is shopping at a store, the system may **notify the remote shopper by sending** (via the transceiver) **location information of which aisle the shopping assistant is located** at utilizing the [GPS] data.” *Id.*, ¶42. As discussed above, it would have been obvious and beneficial to include this functionality in Carr’s assembler device implemented as a smartphone. Ex.1003, ¶¶174-175.

Thus, Yee’s teaching of sending to the remote shopper location information on the agents using GPS data in view of Carr renders obvious this limitation. Ex.1003, ¶¶174-176.

6. Claim 3

[3.1] *The method of claim 2, wherein the information on the one or more agents includes an availability status of the one or more agents.*

Like Carr, Lauka discloses various ways in which “substitutions” for ordered products may be made. *See, e.g.*, Ex.1006, 7:42-8:60. As an aspect of this, Lauka teaches informing a customer whether an agent is available to substitute for an

ordered product, where agent “*availability status*” is based on a deadline:

In some examples, to avoid a sense of urgency, the original [substitution] request to the customer may not include a deadline. If the customer responds in a timely manner, then a deadline is obviated. If, on the other hand, the customer has not responded within a predetermined amount of time (e.g., 15 minutes from the courier cutoff, C), the management module 102 may send a reminder H to the customer including a deadline. If the customer does not respond within a predetermined amount of time (e.g., within 5 minutes of the courier cutoff, C), then the system can simply drop the item from the order to maintain the two-hour deadline.

Ex.1006, 8:20-30.

Lauka’s reminder sent to the customer including a deadline corresponds to “*information on the one or more agents*” including “*an availability status of the one or more agents*”. Ex.1003, ¶¶177-180. This is because the deadline informs the customer of when the agent will no longer be available to fulfill a substitution request. *Id.* In other words, the reminder informs the customer that, from the time the reminder is received to the deadline, the “*availability status of the one or more agents*” is that the agent is available to fulfill the substitution request (e.g., Ex.1006, 7:54-57), while after the deadline, the “*availability status of the one or more agents*” is that the agent is correspondingly unavailable (e.g., Ex.1006, 8:31-36). Ex.1003, ¶180.

A POSITA would have been motivated to incorporate the teachings of Lauka of communicating a deadline to the customer, as doing so facilitates timeliness of fulfilling the customer's order while also balancing the desire to fulfill customer orders. Ex.1003, ¶181. Carr teaches that the "list of substitute goods" is communicated to the customer and describes a scenario where the customer may "choose a substitute good within a predetermined time period," (Ex.1005, ¶97) and the "predetermined time period" is analogous to Lauka's deadline. However, Carr does not explicitly disclose that the predetermined time period is communicated to the customer. Lauka teaches communicating such a predetermined time period or deadline to the customer, which a POSITA would have seen as desirable, to ensure that the customer's order is fulfilled as accurately as possible, while ensuring that the customer's order is delivered according to the system's timeline. Thus, a POSITA would have been motivated to incorporate this teaching of Lauka. Ex.1003, ¶181.

Thus, Lauka in view of Carr renders obvious this limitation. Ex.1003, ¶¶177-182.

7. Claim 10

[10.1] *The method of claim 1, further comprising: delivering the identified product to the delivery site; and*

Carr teaches that its "system 10...may be configured to allow or facilitate

orders to be efficiently delivered to the customer location.” Ex.1005, ¶45, ¶125, ¶40. Thus, Carr renders obvious this limitation. Ex.1003, ¶183.

[10.2] *alerting the customer about delivery.*

Yee teaches that the “system may also send **periodic alerts** allowing the shopper to be notified of different times that the shopping assistant or associated delivery vehicle may be located **en route to delivery...**” Ex.1007, ¶45. As discussed above, a POSITA would have found it obvious to apply the location-based features of Yee to Carr. Ex.1003, ¶184.

Thus, Yee in view of Carr renders obvious this limitation. Ex.1003, ¶¶184-185.

8. Claim 15

[15.1] *The method of claim 14, further comprising: alerting the customer about delivery.*

See [10.2].

E. Ground 3: Claims 6-7 are obvious under 35 U.S.C. § 103 over Carr in view of Lauka and further in view of Cincotta.

1. Summary of Cincotta

Cincotta is “related to online shopping” and focuses on “techniques for enhancing and facilitating the shopping experience for the shopper...by...enhancing the use of coupons.” Ex.1008, ¶3.

2. Reasons to Combine Cincotta with Carr and Lauka

A POSITA would have been motivated to combine the teachings of Cincotta with the teachings of Carr and Lauka. Ex.1003, ¶¶188-194. It would have been obvious, beneficial, and predictable to apply Cincotta’s teachings regarding promotional code information for items in a customer’s shopping cart to the Carr and Lauka combination—for example, to provide the customer with confidence “they are...getting a good if not the best possible deal while shopping online,” as Cincotta provides. Ex.1003, ¶188 (citing Ex.1008, ¶12).

A POSITA, when considering Carr and Lauka, would have also considered Cincotta. Ex.1003, ¶189. Carr, Lauka, and Cincotta all relate to goods ordered over the internet. Ex.1005, Abstract; Ex.1006, Abstract; Ex.1008, ¶3. As such, Cincotta is analogous art. *See, e.g.*, Ex.1001, 1:29-31.

A POSITA would have been specifically motivated to incorporate Cincotta’s teachings because doing so would have resulted in an increased number of customers of the Carr system, which a POSITA would have recognized as desirable. Ex.1003, ¶190. For example, Cincotta teaches that “[o]nline vendors or merchants use promotions or coupons to attract shoppers to their sites” and that a “merchant’s goal in offering the promotion is to drive traffic to the merchant’s site.” Ex.1008, ¶10. These features are not explicitly taught in Carr, but a POSITA would have recognized a benefit to incorporating these features of Cincotta, as a

POSITA would have recognized that customers would be naturally drawn to shopping platforms that offered promotions or coupons, and in particular, platforms that “automatically provide promotional code information from one or more promotions” (Ex.1008, ¶42) because shoppers would appreciate the automatic application of discounts, instead of having to “search for and find a promotion code” (Ex.1008, ¶10) as in the prior art. Thus, in one example implementation of the combination, a POSITA would have found it obvious to modify Carr’s method such that, just before the customer completes his or her order, the teachings of Cincotta would automatically provide applicable promotional codes for the items in the customer’s order, reducing the customer’s cost of the order. Ex.1003, ¶191.

Similarly, a POSITA would have recognized that allowing customers to read reviews on products they are about to purchase, as Cincotta teaches, would provide customers with additional information to make a more knowledgeable purchasing decision, and in turn, would motivate customers to add reviews to supply such information to future customers. Ex.1003, ¶192 (citing Ex.1008, ¶¶159-164). Such reviews would have also potentially increased sales for stores, which would have been seen as a benefit to the store as well. This would have been consistent with the well-known benefits of online shopping reviews at the time of the ’465 patent. *See* Ex.1003, ¶192 (citing literature regarding the popularity of reviews in

e-commerce).

A POSITA would have also had a reasonable expectation of success in making the combination. Ex.1003, ¶193. The combination does not change the intended functionality of Carr, but rather provides additional features to the customer. Any modifications to Carr’s methods and software to accommodate Cincotta’s additional information would have been relatively straightforward to a POSITA, as doing so would have been well-within the level of skill in the art. Ex.1003, ¶193; *Fonar*, 107 F.3d at 1549.

Accordingly, a POSITA would have found it obvious to apply Cincotta’s teachings to Carr’s methods because the combination merely amounts to applying a known technique to a method ready for improvement. Ex.1003, ¶¶188-194.

3. Claim 6

[6.1] *The method of claim 1, further comprising: receiving product data from the customer regarding the one or more goods; and*

Carr teaches that the “first server 24 may host a store webpage which allows a customer to, via a customer device 26, interact with the store 20 and first server 24 to **place an order for one or more items or goods from the store 20.**”

Ex.1005, ¶47. Thus, Carr’s system receiving a customer order for goods renders obvious this limitation. Ex.1003, ¶195.

[6.2] *checking the internet for a digital coupon associated with the product data*

Cincotta teaches that an “one important aspect of the online shopping experience is the shopping cart which lists the items to be purchased.” Ex.1008, ¶40. Cincotta states that its shopping cart “may also automatically provide promotional code information from one or more promotions....The codes could include **publically** [sic] **available promotional codes collected by EOS computer 20 by crawling Internet 16.**” *Id.*, ¶42; *see also* ¶53 (“promotion codes for promotions, coupons...these advantages are implemented by providing a promotion code....”)

By describing crawling the Internet for promotion codes corresponding to coupons associated with a shopping cart, Cincotta in view of Carr renders obvious this limitation. Ex.1003, ¶¶196-197.

4. Claim 7

[7.1] *The method of claim 1, further comprising: generating product reviews associated with the product data which are accessible by the customer.*

Cincotta teaches a “virtual mall” embodiment in which “users visit [a] website and have immediate access to a comprehensive, full listing of e-commerce merchants.” Ex.1008, ¶144. Users are “able to interact with each merchant on three-different element tiers.” *Id.* In a third tier, Cincotta provides users with “user reviews” from a company database and provides the ability to “Add Reviews and Ratings.” Ex.1008, ¶¶159-164. Thus, Cincotta’s teachings of adding reviews

accessible by users in view of Carr renders obvious this limitation. Ex.1003, ¶¶198-200.

F. Ground 4: Claim 13 is obvious under 35 U.S.C. § 103 over Carr in view of Lauka and further in view of Argue.

1. Summary of Argue

Argue discloses “methods...for facilitating shopping assistance.” Ex.1009, Abstract. Argue focuses on “an improved approach for delegating shopping tasks.” *Id.*, ¶5. Argue teaches a method that includes “defining [] a shopping list” by “receiving data from scanning an optical code (e.g. barcode) of a product using a camera of the” customer’s computing device. *Id.*, ¶62.

2. Reasons to Combine Argue with Carr and Lauka

A POSITA would have been motivated to combine the teachings of Argue with the teachings of Carr and Lauka. Ex.1003, ¶¶202-209. It would have been obvious, beneficial, and predictable to apply Argue’s teachings of creating a shopping list by scanning barcodes of products to the Carr and Lauka combination—for example, to provide the customer with an alternative method of establishing the customer’s order. Ex.1003, ¶202.

A POSITA, when considering the teachings of Carr and Lauka, would have also considered the teachings of Argue. Ex.1003, ¶203. Carr, Lauka, and Argue all relate to goods ordered over the internet. Ex.1005, Abstract; Ex.1006, Abstract;

Ex.1008, ¶¶4-5. Thus, Argue is analogous art. *See, e.g.*, Ex.1001, 1:29-31.

A POSITA would have been specifically motivated to incorporate Argue’s teachings because doing so would have provided additional methods of establishing the customer’s order in the Carr and Lauka combination. Ex.1003, ¶204. Specifically, Argue’s teachings provide the ability to define a shopping list (analogous to the customer order in Carr) by “scanning an optical code (e.g. barcode) of a product using a camera.” Ex.1009, ¶62. These features are not explicitly taught in Carr, but a POSITA would have recognized a benefit to incorporating this feature of Argue. Ex.1003, ¶204.

Specifically, a POSITA would have been motivated to incorporate Argue’s technique of using a barcode scan to order products into the Carr and Lauka system because doing so would add an efficient and desirable method of ordering products and address a known issue in one of Carr’s example implementations. Ex.1003, ¶205-206. Specifically, Carr contemplates that the “customer device 26 may include any suitable device including...a handheld mobile device including a cellular telephone.” Ex.1005, ¶56. Before the ’465 patent, a POSITA would have recognized that inputting data into a handheld device was difficult for certain users, because of the small size of such devices, and would have recognized that alternative input modalities for handheld devices were desirable. Ex.1003, ¶206 (citing, e.g., Ex.1018, ¶5 (describing known “fundamental issues” of input

efficiency due to the “compact nature of PDAs”)).

Given this issue, a POSITA would have recognized that Argue’s technique of using a barcode scan to assemble a shopping list would mitigate this known issue and would have been desirable, as incorporating the technique would have provided a simpler method for a user to order products in Carr’s system. Ex.1003, ¶207 (also citing, e.g., Ex.1019, ¶49). Thus, a POSITA would have been motivated to incorporate the teachings of Argue of assembling a shopping list by scanning barcodes. Ex.1003, ¶¶204-207.

A POSITA would have also had a reasonable expectation of success in making the combination. Ex.1003, ¶208. For example, the combination does not change the intended functionality of Carr—it merely enhances it. Further, Argue’s technique is meant to be implemented on a customer’s “mobile phone,” and Carr specifically teaches that its customers use a “handheld mobile device” to place orders. Ex.1009, ¶26; Ex.1005, ¶56. A POSITA would have readily recognized how to adapt Carr’s mobile device to incorporate barcode-based input to build the customer’s order, as taught by Argue; doing so would have required no more than routine software programming that would have been well-within the level of skill in the art. Ex.1003, ¶208; *Fonar*, 107 F.3d at 1549.

Accordingly, a POSITA would have found it obvious to apply Argue’s teachings to the method taught by Carr and Lauka because the combination merely

amounts to applying a known technique to a method ready for improvement.

Ex.1003, ¶¶202-209.

3. Claim 13

[13.1] The method of claim 1, wherein the first acquisition request is established by the customer by making a list of the first set of one or more goods by scanning bar codes or QR codes of existing products the customer wants replaced.

In Carr, each “customer order will include at least one good” and its system is “configured to allow the customer to place the customer order through the customer device” in one example “from a website associated with the store” but it does not further describe how the customer establishes the order. Ex.1003, ¶210 (citing Ex.1005, ¶¶69, 73).

Argue provides further details on known ordering techniques, as it similarly discloses “methods...for facilitating shopping assistance” and describes a “method 700 for setting up a delegation of a shopping task” (i.e., analogous to Carr’s customer order) which includes “defining 702 a shopping list.” Ex.1009, Abstract, ¶62. The “step of defining 702 a shopping list may include one or more of...receiving data from scanning of an optical code (e.g. barcode) of a product using a camera of the principal’s user computing device....” Ex.1009, ¶62.

Thus, Argue’s teachings of establishing a shopping list by scanning barcodes in view of Carr, renders obvious this limitation. Ex.1003, ¶¶210-212.

G. Ground 5: Claims 18-19 are obvious under 35 U.S.C. § 103 over

Carr in view of Lauka and further in view of Dearing.

1. Summary of Dearing

Dearing teaches “providing content associated with an information item on a distribution item using a computing device.” Ex.1010, Abstract. In Dearing, the “information item 10 is shown as a barcode.” Ex.1010, 8:2-10. Responsive to scanning the barcode, “content associated with” the distribution item, such as “media files,” is retrieved from a database. *See* Ex.1010, 12:32-13:8, 8:47-55.

2. Reasons to Combine Dearing with Carr and Lauka

A POSITA would have been motivated to combine the teachings of Dearing with the teachings of Carr and Lauka. Ex.1003, ¶¶214-218. It would have been obvious, beneficial, and predictable to apply Dearing’s teachings of retrieving content associated with a barcode from a database to the Carr and Lauka combination—for example, to provide implementation details for the methods taught by Carr. Ex.1003, ¶214.

A POSITA, when considering the teachings of Carr and Lauka, would have also considered the teachings of Dearing. Ex.1003, ¶215. Dearing is at least reasonably pertinent to one of the problems allegedly addressed by the ’465 patent of retrieving data from scanning a barcode. Ex.1003, ¶215. As such, Dearing is analogous art.

A POSITA would have been specifically motivated to incorporate Dearing’s

teachings because doing so would have provided explicit detail on how to implement functionality disclosed in the Carr and Lauka combination. Ex.1003, ¶216. Specifically, Dearing’s teachings provide detail on how Carr’s “item database 104” which “stores item information associated with items or types of items in the store 20” and which stores “Universal Product Codes (UPC) codes” and “other information associated with the items” (e.g., images) “may be queried” to retrieve such information associated with the items. Ex.1005, ¶116. Dearing explicitly provides teachings that a POSITA would have recognized to be obvious in light of Carr, and a POSITA would have recognized that Carr operates in a manner consistent with that described in Dearing. Thus, in one example implementation of the combination, a POSITA would have found it obvious to implement Carr’s method of retrieving images of a good by scanning the barcode associated with the good and using information from the scan to query a database, as taught by Dearing. Ex.1003, ¶216. This would have been a well-known technique to a POSITA; given Carr’s database, a POSITA would have readily recognized how to query the database, using the UPC code, to retrieve associated images.

A POSITA would have also had a reasonable expectation of success in making the combination. Ex.1003, ¶217. The combination does not change the intended functionality of Carr, but rather, Dearing’s teachings merely provide

implementation details for the methods of Carr. Thus, modifications to Carr's methods and software would not be necessary, or at worst, would be minimal, to accommodate Dearing's teachings, and such modifications would have been relatively straightforward to a POSITA, as doing so would have been well-within the level of skill in the art. Ex.1003, ¶217; *Fonar*, 107 F.3d at 1549.

Accordingly, a POSITA would have found it obvious to apply Dearing's teachings to Carr's methods because the combination merely amounts to the combination of prior art elements according to known methods. Ex.1003, ¶¶214-218.

3. Claim 18

[18.1] *The method of claim 1, wherein the at least one image is obtained from a database on a remote server which links bar or QR codes with images.*

As discussed above, Carr teaches that images of the substitute products are obtained from a database associated with the first server, where the images are associated with products that are linked to the UPC codes scanned by the assembler. For example, Carr teaches that “the assembler **may establish the list of goods by using the UPC reader 74 to read the UPC of the goods** the assembler has chosen to include.” Ex.1005, ¶95. The list of goods and “**associated images**” are then transmitted to the customer. *Id.*, ¶96.

Carr further teaches that the information about each item scanned by the

assembler is contained in and retrieved from a database, including the item's UPC code and associated image. Ex.1005, ¶96 (“database 42, 44 may include **images and/or other information related to the goods** available at the facility”), ¶116 (“item database 104 stores **item information associated with items or types of items in the store 20**....item database 104 may store identification codes, **Universal Product Codes (UPC) codes**, item location in the store 20, **as well as other information associated with the items**....item database 104 may be queried by the processing device 90 and may transmit information to the processing device to facilitate the use of item data.”), ¶87 (“second server 28 may store...the UPC code for each item...and other information as necessary”). A POSITA would have interpreted this disclosure in Carr to teach “*at least one image is obtained from a database on a remote server which links bar or QR codes with images*” because Carr’s database **links** together all “item information” associated with an item, where item information includes both a UPC code and image. Ex.1005, ¶¶96, 116; Ex.1003, ¶¶219-221 (providing an example implementation of Carr’s database).

To the extent Carr does not explicitly teach this claim language, Dearing **explicitly** teaches “*at least one image is obtained from a database on a remote server which links bar or QR codes with images.*” Dearing describes that a “server 18 receives data indicating information about a distribution item 8 from an image of an information item 10 affixed to the distribution item 8.” Ex.1010, 12:32-13:8.

Throughout Dearing, the “information item 10 is shown as a barcode.” *Id.*, 8:2-10. The “data from the information item 10” (i.e., data from the barcode) is then used “to query a database for content associated with the distribution item 8.” Ex.1010, 12:32-13:8. The database response may include “a link to content, such as a URL, or actual content that may be used by a computing device 14” such as “media files.” Ex.1010, 8:47-55. Thus, Dearing explicitly teaches a database linking barcode data with images, and retrieving such image content by scanning a barcode and querying a database to obtain the image content. Ex.1003, ¶222.

Carr, or the combined teachings of Carr and Dearing, therefore render obvious this limitation. Ex.1003, ¶¶219-223.

4. Claim 19

[19.1] *The method of claim 14, wherein the at least one image is obtained from a database on a remote server which links bar or QR codes with images.*

See [18.1].

XI. DISCRETIONARY DENIAL WOULD BE INAPPROPRIATE

A. The Board Should Not Exercise Discretion to Deny Under §314(a) Based on Previous Petitions or Parallel Litigations

The Board should not exercise discretion under §314(a), as the ’465 patent has not been challenged in any prior petition. Further, the ’465 patent is not the subject of parallel litigation.

B. Discretionary denial under 35 U.S.C. §325(d) is not appropriate

None of the asserted prior art was cited or the basis for rejection during examination, and there is no overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art. *Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 (Feb. 13, 2020) (precedential).

Petitioner notes that previous Board panels have exercised discretion to not institute, citing §325(d), where a Petition challenged entitlement to an earlier priority date, finding that entry of an examiner's amendment amounted to previous Office consideration of the written description issue. *See Apple, Inc. v. Seven Networks, LLC*, IPR2020-00425, Paper 10 (Sept. 1, 2020) ("Seven"). *Seven* is a non-precedential routine Board decision, and is distinguishable on its facts.

In *Seven*, the record reflected, in the examiner's interview summary, that the "claim contents in view of the specification" were discussed before entry of the examiner's amendment. *See Seven*, 14. There is no record of a similar discussion here. Rather, the Interview Summary reads, in full: "The examiner called applicant to discuss proposed amendments to allow the application. Applicant agreed to the amendments and the substance of the amendments are reflected in the notice of allowance." Ex.1002, 33.

There is no record evidence to support that the examiner and applicant

discussed the specification when contemplating the examiner’s amendment. Nor is the examiner’s statement that the application was “examined under the pre-AIA first to invent provisions” probative. Ex.1002, 74; *see also Flex Logix Techs. Inc. v. Konda*, PGR2019-00042, Paper 14, pp. 22-23 (Sept. 19, 2019) (rejecting patent owner argument that examination under pre-AIA statutes precludes effective filing date analysis and post-AIA review). Additionally, as concerns the limitations lacking written description support (*see supra* §VI), the examiner’s amendment added only the “*upon failing to locate an identified product of the set of one or more goods*” limitation in claim 1. *See* Ex.1002, 28. There would have been no need for the examiner to look to the specification for this subject matter as the similar recitation of “*determining that the identified product is not available*” was present in claim 14 at filing and was not modified or introduced by the examiner. *See* Ex.1002, 320. Further, the subject matter of “*determining*” information from the bar code or QR code was introduced by the applicant, not the examiner. *See* Ex.1002, 317, 320.

Thus, this case is more like *Guardant Health, Inc. v. Univ. of Washington*, where there was “no evidence in the record where the issue of written-description support” for certain limitations “was presented to the Office previously,” and the Board declined to “speculate that the examiner considered the issue.” IPR2022-01158, Paper 19, 10 (Jan. 13, 2023). Likewise, this case is like *Motorola Mobility*

LLC v. Largan Precision Co., Ltd., where there were “no arguments raised regarding written description support” in the file history and the Board concluded the Examiner “did not analyze written description” and thus did not exercise discretion. IPR2022-01170, Paper 11, 9 (Jan. 26, 2023). Because there is no record support to conclude the examiner considered whether the limitations discussed above were supported by the written description, there is no basis to exercise discretion under §325(d).

Further, even if the written description issue was considered, the examiner erred by suggesting amendments that objectively did not have specification support, as shown above. This constitutes examiner error under *Advanced Bionics* prong two, and for this additional reason, there is no basis to exercise discretion under §325(d).

XII. CONCLUSION

Petitioner has established a reasonable likelihood that the Challenged Claims are unpatentable.

Respectfully submitted,

Dated: May 10, 2023
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XIII. MANDATORY NOTICES

A. Real Party-in-Interest

Pursuant to 37 C.F.R. § 42.8(b)(1), Petitioner certifies that the real party-in-interest is Maplebear Inc. d/b/a Instacart.

B. Related Matters

Pursuant to 37 C.F.R. § 42.8(b)(2), to the best knowledge of the Petitioner, the '465 patent is related to the following pending application: U.S. 17/585,779.

The '465 patent is also related to additional U.S. Patents, which are the subject of pending *inter partes* review proceedings as follows: U.S. Patent No. 8,244,594 (IPR2022-01356); U.S. Patent No. 10,628,835 (IPR2022-01357); U.S. Patent No. 10,115,067 (IPR2022-01358); and U.S. Patent No. 9,202,191 (IPR2022-01359).

C. Lead and Back-up Counsel and Service Information

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CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), Petitioner hereby certifies, in accordance with and reliance on the word count provided by the word-processing system used to prepare this Petition, that the number of words in this paper is 13,994. Pursuant to 37 C.F.R. § 42.24(d), this word count excludes the table of contents, table of authorities, mandatory notices under § 42.8, certificate of service, certificate of word count, appendix of exhibits, and any claim listing.

Dated: May 10, 2023

/Raghav Bajaj/
Raghav Bajaj
Lead Counsel for Petitioner
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CERTIFICATE OF SERVICE

The undersigned certifies that, in accordance with 37 C.F.R. § 42.6(e) and 37 C.F.R. § 42.105, service was made on Patent Owner as detailed below.

Date of service May 10, 2023

Manner of service FEDERAL EXPRESS

Documents served Petition for *Inter Partes* Review Under 35 U.S.C. § 312 and 37 C.F.R. § 42.104 of U.S. 11,238,465; Petitioner's Exhibit List; Exhibits 1001-1028.

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