

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.

IPR2022-01358
Patent 10,115,067 B2

Before CARL M. DEFRANCO JR., ROBERT L. KINDER, and
MICHAEL A. VALEK, *Administrative Patent Judges*.

VALEK, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)

I. INTRODUCTION

Maplebear Inc. (“Petitioner”) filed a Petition (Paper 1, “Pet.”), seeking *inter partes* review of claims 1–5, 8, 9, 12, 14, 18, 19, and 21–28 of U.S. Patent No. 10,115,067 B2 (Ex. 1001, “the ’067 patent”). We instituted trial on all of the grounds in the Petition. Paper 9, 36 (“Dec.”).

Consumeron, LLC (“Patent Owner”) subsequently filed its Response to the Petition (Paper 19, “Resp.”), Petitioner filed its Reply (Paper 24, “Reply”) and Patent Owner filed its Sur-reply (Paper 30, “Sur-reply.”). We held a hearing on January 11, 2024, and a transcript is of record. Paper 35.

After considering the parties’ arguments and evidence, we find that Petitioner has shown by a preponderance of the evidence that the challenged claims of the ’067 patent are unpatentable. *See* 35 U.S.C. § 316(e). Our reasoning is explained below.

II. BACKGROUND

A. *Real Parties in Interest*

The parties identify themselves as the only real parties-in-interest. Pet. 77; Paper 3, 1.

B. *Related Matters*

The parties identify *Consumeron, LLC v. Maplebear Inc. d/b/a Instacart*, No. 1:21-cv-01147 (D. Del.), referred to herein as “the Delaware litigation,” as a related matter involving the ’067 patent. Pet. 77; Paper 3, 1.

Although not identified in the parties’ notices, the following proceedings involve the same parties and challenge patents related to the ’067 patent: IPR2022-01356, IPR2022-01357, IPR2022-01359, and IPR2023-00865.

C. The '067 Patent

The '067 patent issued on October 30, 2018, and claims priority to a series of applications, the earliest of which was filed on August 26, 2009. Ex. 1001, codes (45), (60).

The '067 patent describes “[a] system and method for remote acquisition and delivery of goods” that includes a server in communication with customer computers or devices and a mobile delivery system also referred to as a mobile delivery agent system (“MDAS”). Ex. 1001, Abstr., 2:3–12. Figure 1 of the '067 patent, reproduced below, “is a schematic diagram of the remote acquisition and delivery system of the present invention.” *Id.* at 2:49–50.

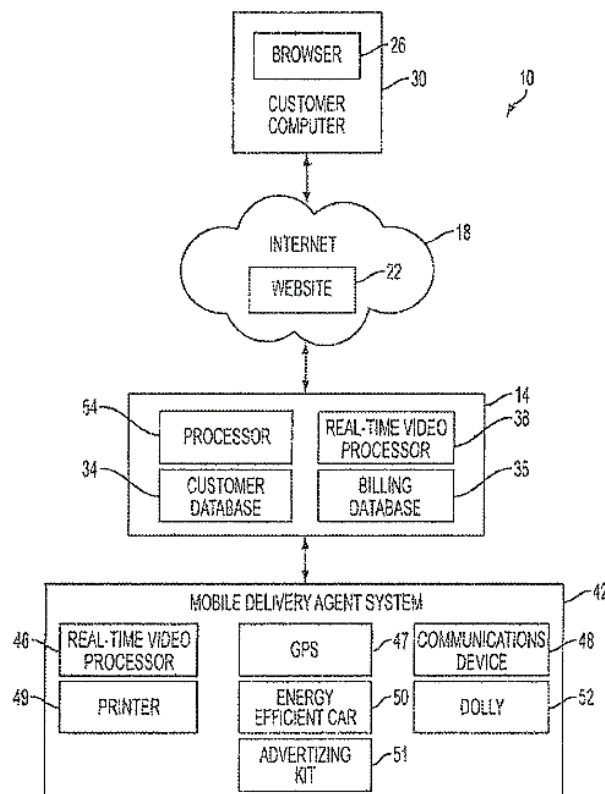


FIG. 1

Figure 1 depicts a customer computer 30 accessing a service provider's server 14 over the Internet. *Id.* at 2:61–66. Server 14 communicates with a plurality of mobile delivery agent systems such as MDAS 42 in Figure 1. *Id.* at 3:17–22. MDAS 42 includes a real-time video processor 46, global positioning system (GPS) 47, and a communications device 48. *Id.*

The Specification explains that a customer may contact the service provider through the system depicted in Figure 1 and receive information regarding delivery agents in the vicinity of a store where they would like to purchase a product. Ex. 1001, 4:33–47. After the delivery agent is selected, “a customer shopping or acquisition request and profile is sent to the delivery agent . . . and a communications link is established between the customer and the selected delivery agent . . . such as through a telephone or internet connection” using communications device 48 in MDAS 42. *Id.* at 5:33–38. The delivery agent then travels to the store, finds the desired product, and “the customer has the option of inspecting the product in real-time.” *Id.* at 6:49–7:4. “If the customer chooses to inspect the product, the customer will communicate instructions to the delivery agent . . . and the delivery agent will utilize real-time video device 46 to transmit real-time data to customer computer 30.” *Id.* at 7:4–8. The customer then “approves or rejects acquisition of the inspected product.” *Id.* at 7:14–15. If the product is approved, “the delivery agent will purchase or otherwise acquire the product on behalf of the customer” and deliver the product based on the customer's delivery instructions. *Id.* at 7:24–30.

According to the Specification,

Real-time video device 46 is preferably utilized throughout the transaction to show the location of the delivery agent as the agent is driving to a desired purchase location, to

show the product at the purchase location, and to verify delivery of the product to the customer at the designated delivery location. Preferably, video footage is stored on server 14 and can be accessed for delivery agent evaluation, for liability and public safety purposes, for delivery agent history or dispute resolution purposes, for example.

Ex. 1001, 8:22–30.

D. Challenged Claims

The Petition challenges claims 1–5, 8, 9, 12, 14, 18, 19, and 21–28.

Claim 1 is illustrative and reproduced below with the same bracketed annotations the Petition includes to identify particular limitations.

1. A method for remote acquisition and delivery of goods comprising:

[1.1] at least one remote server receiving, through the internet or a network from a user interface on a customer computer at a first location, a first acquisition request from a first customer for a first set of one or more goods, at a second, service location;

[1.2] the at least one remote server sending instructions based on the first acquisition request, to a communication device of a mobile delivery agent system located at a third location;

[1.3] the at least one remote server deploying the mobile delivery agent system from the third location to a fourth, shopping location, having the first set of one or more goods, by providing instructions to the communication device,

[1.4] wherein the mobile delivery agent system includes: an image capture device and the communication device;

[1.5] obtaining an image, with the mobile delivery agent system through use of the image capture device, of the first set of one or more goods at the shopping location;

[1.6] electronically transmitting, with the mobile delivery agent system through use of the communication device, the image of the first set of one or more goods from the shopping location to the customer computer of the first customer;

[1.7] receiving, with the communication device of the mobile delivery agent system, further instructions from the first customer, through the customer computer, about the first set of one or more goods based on the transmitted image;

[1.8] acquiring the first set of one or more goods at the shopping location via the mobile delivery agent system; and

[1.9] delivering the first set of one or more goods from the shopping location to a delivery site.

Ex. 1001, 10:8–43. Claims 27 and 28 are also independent and recite limitations similar to those in claim 1. *See id.* at 12:23–14:16.

E. Asserted Grounds of Unpatentability

Petitioner asserts the following grounds of unpatentability:

Claim(s) Challenged	35 U.S.C. §¹	Reference(s)/Basis
1, 2, 5, 12, 14, 18, 19, 25–28	103(a)	Park, ² Kim ³
3, 4, 9, 24	103(a)	Park, Kim, Hileman ⁴
21	103(a)	Park, Kim, Mault ⁵
8, 22, 23	103(a)	Park, Kim, Pugliese ⁶

¹ The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), included revisions to 35 U.S.C. § 103 that became effective after the filing of the applications to which the ’067 patent claims priority. Therefore, we apply the pre-AIA version of § 103.

² WO 01/11523 A1, published Feb. 15, 2001 (Ex. 1005) (“Park”).

³ KR2003-0085802, published Nov. 7, 2003 (Ex. 1007). The Petition relies on a certified translation of this Korean language reference (Ex. 1006). In the institution decision, we noted what appeared to be a typographical error in the translated version of Kim’s Figure 2 and authorized Petitioner to file a corrected version of that figure. Dec. 33. Petitioner filed the corrected, certified translation of Kim’s Figure 2 as Ex. 1038. Herein, we refer to the certified translations in Exhibits 1006 and 1038 as “Kim.”

⁴ US 2003/0040944 A1, published Feb. 27, 2003 (Ex. 1009) (“Hileman”).

⁵ US 2002/0027164 A1, published Mar. 7, 2002 (Ex. 1016) (“Mault”).

⁶ US 2002/0072974 A1, published June 13, 2002 (Ex. 1010) (“Pugliese”).

In support of these grounds, Petitioner relies on declarations from Dr. Henry Houh submitted with the Petition (Ex. 1003) and Reply (Ex. 1044). Patent Owner relies on the declaration of Dr. Michael Mitzenmacher (Ex. 2016).

III. ANALYSIS OF THE ASSERTED GROUNDS

A. Legal Standards

Under the pre-AIA version of § 103(a), a claim is unpatentable for obviousness if, to one of ordinary skill in the pertinent art, “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made.” 35 U.S.C. § 103(a) (2006); *see also KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) when in evidence, objective evidence of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

B. Level of Ordinary Skill in the Art

Petitioner contends a person of ordinary skill in the art (“POSITA”) in August 2009 (the earliest alleged priority date) would have been someone knowledgeable and familiar with the electronic commerce arts that are pertinent to the ’067 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.

Pet. 13–14 (citing Ex. 1003 ¶ 24).

Patent Owner offers a similar description, asserting that a POSITA “is someone with a background in electrical engineering, computer science or the like” and that either experience or training can make up for a lack of the other. Resp. 9–10 (citing Ex. 2016 ¶¶ 17–20).

We adopt Petitioner’s definition of the level of ordinary skill in the art. This definition is supported by the record (Ex. 1003 ¶ 24) and consistent with the disclosure in the ’067 patent and the references cited in the Petition. Patent Owner’s definition is “not materially different” from Petitioner’s definition. *See* Ex. 2016 ¶ 20 (Patent Owner’s declarant acknowledging such). Thus, our analysis and findings would be the same under either sides’ proposal.

C. Claim Construction

In an *inter partes* review, claim terms “shall be construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. [§] 282(b), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” 37 C.F.R. § 42.100(b).

i. “mobile delivery agent system”

The parties agree that “mobile delivery agent system” or MDAS is a “coined term” with no established meaning in the art. Pet. 14; Paper 6, 20.

In the institution decision, we agreed with and applied the same MDAS construction adopted by the district court in the Delaware litigation. Dec. 12–14. That is, a “mobile delivery agent system” is “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. 1034, 1. To the extent

there was any substantive disagreement with this preliminary construction, we invited the parties to present their alternative positions at trial. *See* Dec. 14.

Neither party has done so. *See* Resp. 13 (applying same MDAS construction); Reply 1–5 (addressing other claim construction issues, but not raising any issue with the MDAS construction). Accordingly, we apply the same construction of “mobile delivery agent system” here.

ii. “real-time”

The term “real-time” is not recited in the independent claims, but does appear in some of the challenged dependent claims. *See* Ex. 1001, 10:8–14:16 (claims 14 and 18). In the institution decision, we agreed with and applied the same construction adopted by the district court in the Delaware litigation. Dec. 14–15. That is, that “real-time” has its ordinary meaning, which is “data that is passed along as it is gathered.” Ex. 1034, 2. Neither party has proposed an alternative construction. *See* Resp. 13 (applying same “real-time” construction); Pet. 14 (asserting that “the terms of the Challenged Claims should be given their ordinary and customary meaning”).

Accordingly, we apply the same construction of “real-time” here.

iii. “acquisition request”

The parties dispute the meaning of “acquisition request.” *See* Resp. 10–12; Reply 1–5.

Patent Owner contends “acquisition request” should be construed to mean “a request for an agent to shop for goods on a customer’s behalf.” Resp. 10.

Petitioner, on the other hand, argues: “[n]either intrinsic nor extrinsic evidence . . . requires the agent to ‘shop’ or make a purchase.” Reply 1.

According to Petitioner, “the agent must simply acquire goods, consistent with the claim’s plain language” and “[i]t would be improper to narrowly require shopping when [Patent Owner] elected to broadly claim *all* types of “acquisition request[s].” *Id.* at 1–2.

We agree with Petitioner. Contrary to Patent Owner’s assertions, the Specification does not exclusively equate an “acquisition request” with a shopping or purchase request. *See* Resp. 10–12. Rather, the Specification repeatedly uses the phrasing “purchase or otherwise acquire” to indicate that a delivery agent may acquire goods by means other than purchasing or shopping. *See, e.g.*, Ex. 1001, 5:4–6 (“[T]he user specifies the exact location from which the selected delivery agent is to purchase or otherwise acquire the product, such as a retail store location.”); *id.* at 7:24–26 (“If the product is approved at 120, the delivery agent will purchase or otherwise acquire the product on behalf of the customer at 121 and deliver the product.”); *id.* at 2:15–18 (“[T]he user provides the service provider with information regarding the type of product desired and the shopping or acquisition location from which the user desires to purchase or otherwise obtain the product.”).

Patent Owner’s argument that the Specification uses the “word ‘or’ to refer to things that are synonymous to each other” is not persuasive. *See* Resp. 10; Sur-reply 4 (citing *Epic Games, Inc. v. Ingeniosh, LLC*, IPR2022-00202, Paper 29, 18–19 (PTAB May 19, 2023)). As noted above, the Specification uses the phrasing “purchase or *otherwise* acquire.” Ex. 1001, 5:4–6, 7:24–26 (emphasis added); *see also id.* at 2:15–18 (similar). By including the adverb “otherwise,” the Specification makes clear that purchase and acquire are not used synonymously, but rather that acquiring is

broader and encompasses other ways of obtaining a product. *See* Ex. 1039, 1 (“otherwise” means “in a different way or manner”).

Indeed, the Specification unequivocally describes instances in which the agent acquires a product without purchasing or shopping for it. For instance, the Specification explains that the customer may “pre-purchase[]” goods that the delivery agent subsequently acquires by “pick-up”:

[a]lternatively, the customer has the option of *paying the retailer or seller directly*, in which case the customer will only be billed for the pick-up and delivery services provided. . . . If *pre-purchased* by the customer, the delivery agent obtains a receipt showing proof of *pre-payment* by the customer.

Ex. 1001, 7:50–58 (emphases added).

Patent Owner attempts to distinguish this description, urging that it is an alternative embodiment that “does not expand the meaning of the term ‘acquisition request’ beyond its ordinary meaning.” Sur-reply 4–5. But that argument is premised on an incorrect assumption that the ordinary meaning is limited to purchasing or shopping. There is nothing in the intrinsic record here that suggests the term “acquisition request” excludes the Specification’s “pre-purchase” embodiments.⁷ To the contrary, as noted above, the Specification repeatedly states the agent may “otherwise acquire” goods

⁷ Patent Owner’s argument that the pre-purchase embodiment “renders meaningless other claim language” is unpersuasive. Sur-reply 5 (referring to claim 16). Claim 16 is not challenged here, but recites a printer in the MDAS that is used to print out a coupon that is applied “to a purchase during the step of acquiring the first set of one or more goods.” Ex. 1001, 11:45–50. Even if claim 16 could somehow be read to exclude the pre-purchase embodiment, it is a dependent claim and the additional claim language it recites does not show that the claims from which it depends (i.e., claims 1 and 15) are so limited.

without purchasing them, thus indicating that an acquisition request can be fulfilled *without* needing to shop on the customer's behalf. *See* Ex. 1001, 5:4–6, 7:24–26.

The extrinsic evidence also favors Petitioner's position. Like the description in the Specification, the dictionary definitions of “acquire” Petitioner cites contemplate acquiring by means other than purchasing or shopping. *See* Ex. 1042, 1 (“If you acquire something, you buy or obtain it for yourself, or someone gives it to you.”); Ex. 1043, 1 (“acquire” means “to come into possession or control of often by unspecified means”).

In contrast, the narrower definition Patent Owner cites is not persuasive. *See* Ex. 2018, 1. First, Patent Owner's definition comes from an unrelated statute, 16 U.S.C. § 620, and provides the meaning Congress intended within the context of that statute.⁸ *Id.* Patent Owner has not explained why that definition should apply outside that context, much less demonstrated that it reflects the ordinary meaning to a POSITA here. Second, as explained above, the Specification expressly contemplates means of acquiring a product such as picking up a pre-purchased product that do not require the agent to shop for it. To the extent Patent Owner's extrinsic definition conflicts with the broader description in the intrinsic record, we do not credit it. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc) (explaining that judges are free to consult extrinsic sources for definitions “so long as th[at] definition does not contradict any definition

⁸ Title 16 of the United States code relates to conservation of natural resources and § 620 specifically to forest conservation. *See* 16 U.S.C. § 620(b)(1) (stating that the purpose of section 620 is “to promote the conservation of forest resources”).

found in or ascertained by reading of the patent documents”) (internal quotations omitted).

For these reasons, we agree with Petitioner that the term “acquisition request” has its ordinary meaning, which encompasses but is not limited to purchasing or shopping and includes other means of acquiring a product. Accordingly, we construe “acquisition request” to include not only a request for an agent to shop for and purchase goods for delivery to a customer, but also to encompass a request for a delivery agent to pick up or obtain goods that have been pre-purchased by the customer.

No further claim construction is necessary for this decision.

D. References Relied Upon

i. Park

Park is a publication of a PCT application filed August 4, 2000, and published February 15, 2001. Ex. 1005, codes (22), (43). Petitioner asserts, and Patent Owner does not dispute, that Park qualifies as prior art under 35 U.S.C. § 102(b). Pet. 17.

Park discloses a system and method for real-time ordering and delivery of locally available products. Ex. 1005, code (54). Park teaches that customers in predefined geographical regions can access its system over the Internet using a website to order products, including perishable food items, that will then be delivered within a specified delivery window. *Id.* at Abstr., 1:11–16. According to Park, this is “a real-time network-based order and delivery system that will allow customers to interactively view, in real-time, the progress of his order, from reception and compilation to delivery through the route taken by the delivery agent.” *Id.* at 4:27–32.

Figure 1 of Park is a system block diagram and reproduced below.

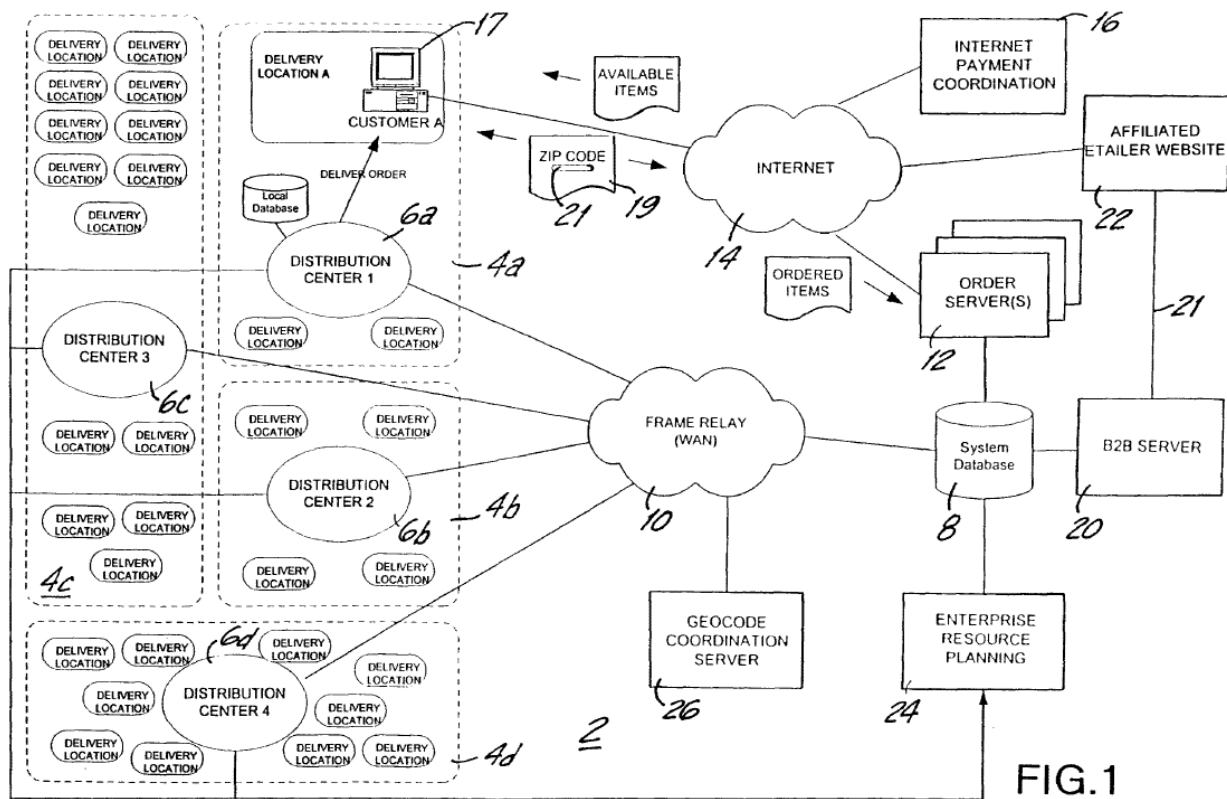


Figure 1 of Park shows a customer at delivery location A using their computer (17) to connect through the Internet (14) to order server(s) (12) to view information about products available through a distribution center associated with the customer's zip code. *Id.* at 14:26–15:10, 20:14–21:2. Park teaches that the customer may place an order for their desired product and pay “with a checkout methodology.” *Id.* at 3:13–19, 14:16–24.

The order is then sent to an order dispatching system at a distribution center (e.g., Distribution Center 1 in Figure 1) associated with the customer's zip code. Ex. 1005, 15:21–24. Figure 2 of Park is reproduced below and “illustrates the process flow at each distribution center for fulfilling and delivering the items ordered.” *Id.* at 16:9–11.

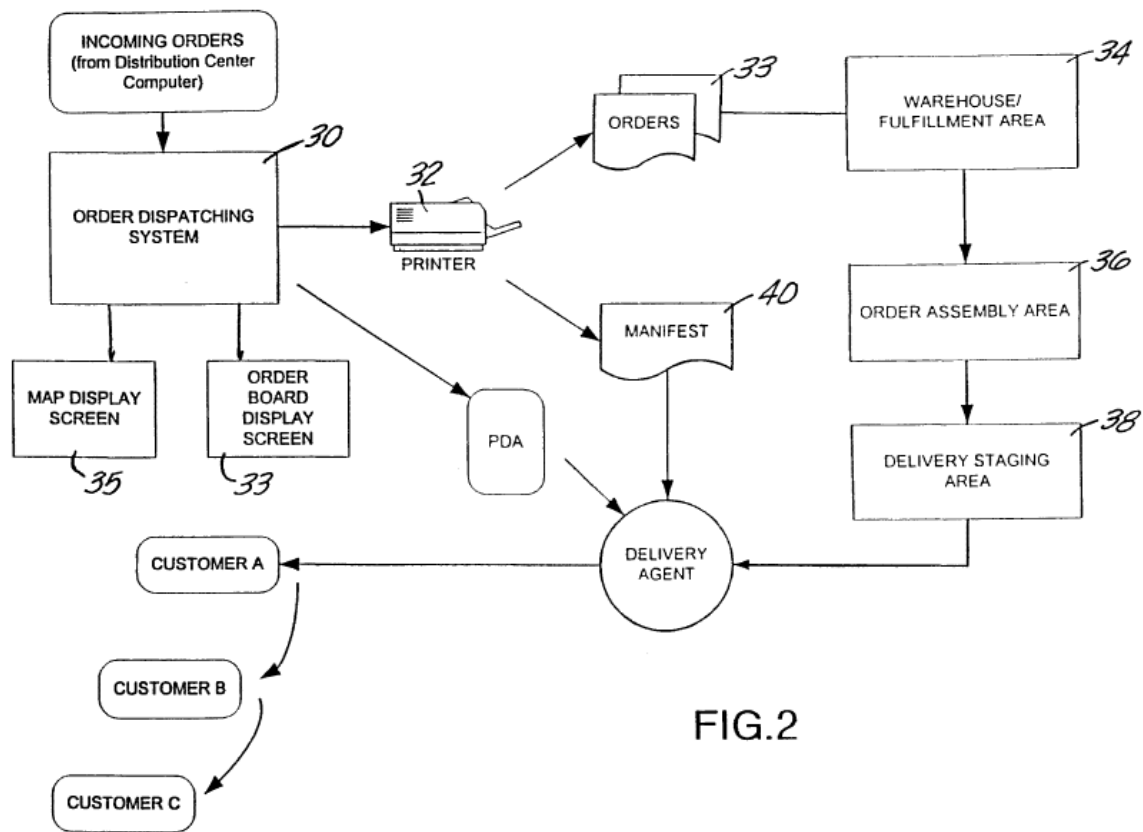


FIG.2

As shown in Figure 2 of Park, incoming orders are received by order dispatching system (30). An order ticket (33) is printed and used to assemble the order for delivery by a delivery agent. *See id.* 16:11–31.

Park teaches that the system can use GPS to examine delivery agents' current position and “generate[] an optimal set of routes for the agents to follow” that “may be transmitted to [the] handheld or mobile computing devices of the agents mapping out the route to be taken” to deliver particular orders. Ex. 1005, 29:6–30:8. The agent’s mobile computing device allows them “to receive delivery information and new routing instructions” from the dispatching system. *Id.* at 47:4–9. The mobile computing device may also “have input means to provide comments related to the delivery . . . transmitting means to provide real-time status to the delivery and ordering system, and position means such as a global position indicator system for

determining the physical location of the agent with respect to the route.” *Id.* at 47:16–23.

Park explains that information regarding the agent’s location “may be provided to the customer” such that the customer can “view the current location of their delivery and . . . see the progress made on a map provided by the web server.” Ex. 1005, 47:32–48:3. In addition, Park teaches that “[t]he delivery agent in the field will be provided with a mobile digital camera which will be capable of transmitting digital video through a third party network back to the web server,” which “will then present the video over the Internet.” *Id.* at 48:12–16. Park further teaches that this equipment is “used to provide online customers with a ‘first person’ view of the delivery of their order” via a “live video feed” from the agent’s mobile digital camera. *Id.* at 48:10–12, 48:19–20; *see also id.* at 49:9–11 (explaining that the video “would be paused” during actual delivery of the order to preserve customer privacy). According to Park, “[t]his information, combined with online information regarding the progress of the rider . . . would provide the most advanced order tracking information available today.” *Id.* at 49:13–17.

ii. Kim

Kim is a Korean patent application bearing a November 7, 2003 publication date. Ex. 1006, (code 43). Petitioner asserts, and Patent Owner does not dispute, that Kim qualifies as prior art under 35 U.S.C. § 102(b). Pet. 17.

Kim explains that websites display images and videos of products for customers to order and have delivered. Ex. 1006, 2. “However, when purchasing products from such websites, customers often end up receiving

products which are not identical to the products ordered as they made the purchases simply based on the images or videos presented by the websites.”
Id.

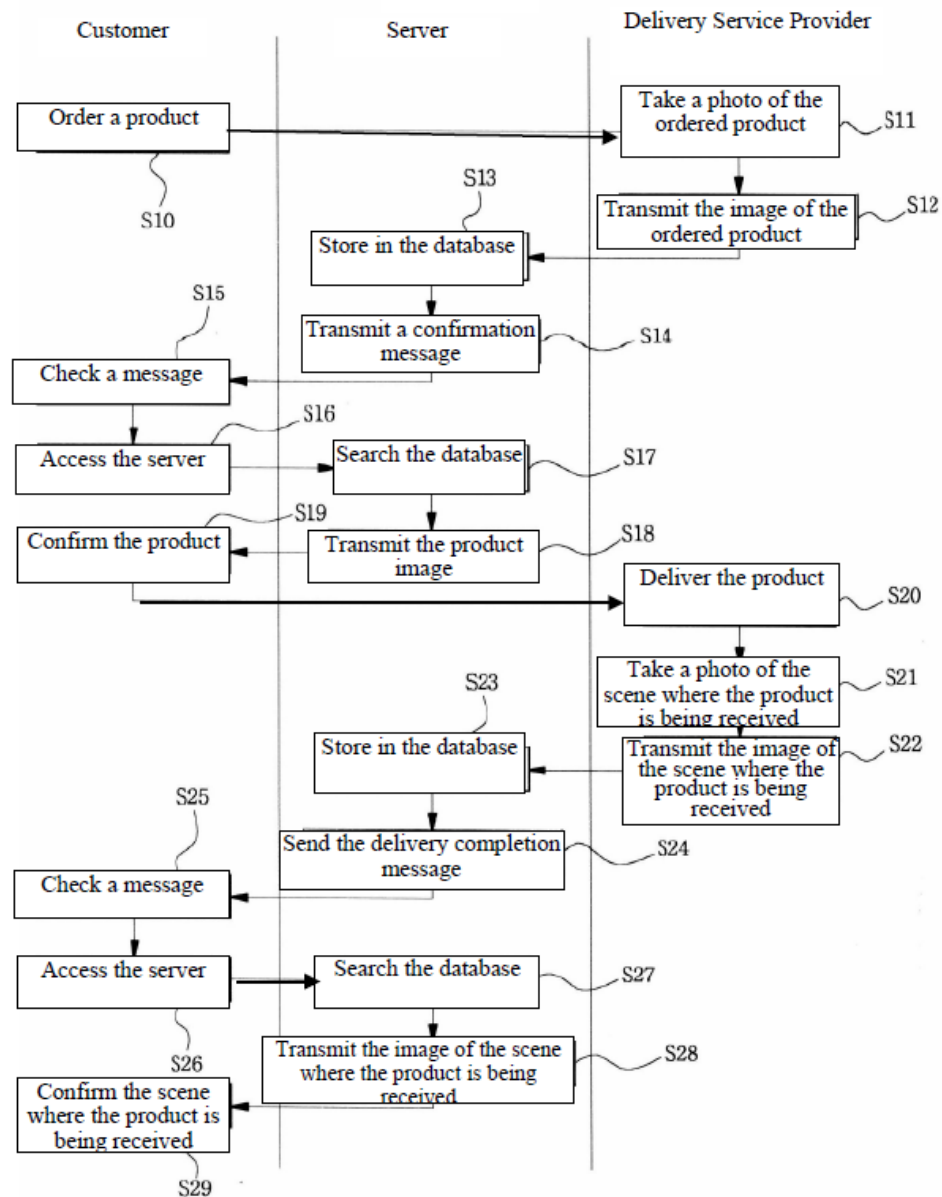
To address this problem, Kim discloses a system and method “designed to confirm product delivery through images by utilizing a mobile communication terminal equipped with a digital camera.” Ex. 1006, Abstr. Kim teaches that

[u]pon receiving an order of a product from a customer . . . a delivery service provider uses his/her mobile communication terminal equipped with a digital camera to capture an image of the product ordered by the customer and transmits it to a server. Subsequently, the server transmits a confirmation message to the customer to inform that the order has been received and then transmits the image of the ordered product to the customer who has checked the message so that the customer can confirm whether the product ordered is identical to the product being delivered.

Id. According to Kim, the system and method utilize the digital camera to take the images and “send the images to the customer real-time so that the product ordered or a scene in which the product is being received can be confirmed.” *Id.* at 2.

Figure 2 of Kim, reproduced below, is a flowchart illustrating an embodiment of Kim’s method. Ex. 1038.

FIG. 2



As depicted in Figure 2 of Kim, a customer orders a product (S10) prompting the delivery service provider to take a photo of the ordered product (S11) “by using his/her own mobile communication terminal . . . equipped with a digital camera.” Ex. 1006, 4. That image is transmitted to a server, stored in a database (S13), and the server then transmits a confirmation message to the customer (S14). *Id.* “Subsequently the customer

checks the message on the received order (S15) which arrived at his/her own mobile communication terminal . . . and accesses (S16) the server . . . to confirm the image or video of the ordered product by using his/her own mobile communication terminal.” *Id.* This causes the image or video to be transmitted to the customer’s mobile communication terminal (SS17 and S18), which “displays the image or video received as such (S19) to confirm the product.” *Id.* “Thereafter, the delivery service provider delivers the product (S20) ordered and confirmed by the customer.” *Id.*

iii. *Hileman*

Hileman is a United States patent application published on February 27, 2003. Ex. 1009, code (43). Petitioner asserts, and Patent Owner does not dispute, that Hileman qualifies as prior art under 35 U.S.C. § 102(b). Pet. 17.

Hileman discloses an on-demand transportation system that includes a server in communication with a user and a vehicle. Ex. 1009, Abstr. “The user provides the server with transportation request information, and requests transportation options from the server.” *Id.* Hileman teaches that the server evaluates the transportation request and “determines transportation options, including available routes of travel (times, paths, etc.) and the charges associated with the various available routes of travel.” *Id.* According to Hileman, the server then notifies the user of the options and associated costs and, after the “user selects one of the transportation options,” books the requested transportation. *Id.*

iv. *Mault*

Mault is a United States patent application published on March 7, 2002. Ex. 1016, code (43). Petitioner asserts, and Patent Owner does not dispute, that Mault qualifies as prior art under 35 U.S.C. § 102(b). Pet. 17.

Mault discloses a “[p]ortable computing apparatus for aiding a user in the monitoring of the consumption of consumable items, such as food items or prescribed medicaments, and reorder such items.” Ex. 1016, Abstr. Mault teaches that the portable computing apparatus has an “item-identification input means,” such as a barcode reader or image-sensing device, “for inputting item-identification information identifying the items as and when to be consumed by the user.” *Id.* ¶¶ 14, 19. According to Mault, “a person may use the described apparatus for ordering items over a communications network, e.g., using the Internet.” *Id.* ¶ 59.

v. *Pugliese*

Pugliese is a United States patent application published on June 13, 2002. Ex. 1010, code (43). Petitioner asserts, and Patent Owner does not dispute, that Pugliese qualifies as prior art under 35 U.S.C. § 102(b). Pet. 17.

Pugliese describes the “ShopLive system,” which provides access to merchandise and sales assistants over a communication network,” such as the Internet, “to display items and to provide expert information on products.” Ex. 1010, Abstr., Fig. 2. In relevant part, Pugliese teaches that “[s]hoppers can initiate an e-sale call with a live sales person who shows them a product via networked live Internet enabled cameras and who responds to inquiries to demonstrate or display the product [in] real-time.” *Id.* ¶ 8. The system also includes an “accept/reject product from merchant function to add or decline a product” shown to them by video. *Id.* ¶ 237.

E. Ground 1: obviousness over Park and Kim

Petitioner contends claims 1, 2, 5, 12, 14, 18, 19, and 25–28 would have been obvious over Park and Kim. *See* Pet. 17–51. As explained below,

Petitioner has shown by a preponderance of the evidence that these claims would have been obvious over the asserted combination of these references.

i. Claims 1, 27, and 28

Claim 1 is representative of Petitioner's analysis for independent claims 27 and 28. *See* Pet. 24–38, 50–51 (relying on same analysis). Petitioner asserts that Park teaches or suggests many of the elements of claim 1 (*see id.* at 24–38), but acknowledges that Park “is silent as to allowing a customer to confirm the product before delivery” by obtaining an image of the product from and communicating instructions to the delivery agent's mobile computing device (*id.* at 21). That functionality relates to claim elements 1.5–1.7. For those elements, Petitioner relies on Kim's teaching that “a delivery service provider uses his/her mobile communication terminal equipped with a digital camera to capture an image of the product ordered by the customer,” “send the images to the customer,” and receive confirmation back from the customer's device. *Id.* at 34–37 (quoting and citing Ex. 1006, Abstr., 3, Fig. 2).

Petitioner contends a POSITA would have been motivated to combine Park and Kim and would have had a reasonable expectation of success in doing so. Pet. 19–24. More specifically, Petitioner contends a POSITA would have been “motivated to incorporate Kim's customer confirmation technique into Park because doing so would address a well-known problem in the art,” i.e., “customers ordering products over the Internet often receive goods that are not identical to the products ordered.” *Id.* at 20. According to Petitioner, a POSITA would have had a reasonable expectation of success in making the combination given the “close overlap” between the references as well as the fact “that Kim's technique requires a mobile communication

terminal with a digital camera, which are components Park's delivery agents already carry." *Id.* at 23–24.

Petitioner's arguments and evidence are persuasive to show that claims 1, 27, and 28 would have been obvious over the combination of Park and Kim in the Petition. Park teaches a method in which a customer accesses a website through a user interface on their computer to place an order for desired goods. Ex. 1005, Abstr., 3:10–19, 14:26–29. That order is an "acquisition request," which as depicted in Park Figure 1 is transmitted from the customer's computer 17 at a "first location" through the Internet and received by an order server 12 at a "second location" (element 1.1). *Id.* at Fig. 1, 19:27–30 (customer's computer is "capable of generating order input and transmitting that order to the order server 12" using "Internet communications"). After the order is received, it is input into an order dispatching system 30 at the second location. *Id.* at Fig. 2, 15:26–30, 16:9–14. The order dispatching system generates a manifest and a route for delivering to a delivery agent's mobile computing device, i.e., a "mobile delivery agent system" (element 1.2). *Id.* at Fig. 2 ("PDA" of "Delivery Agent"), 13:1–4 (manifest electronically stored on agent's device), 25:7–15, 30:6–8 (route determined and transmitted to agent's device). Park teaches that this information is communicated to a delivery agent in the field, i.e., at a "third location," who then travels to another location such as a distribution center, i.e., "a fourth, shopping location having the set of one or more goods," to pick up the customer's order (element 1.3). *See id.* at 25:4–23 (dispatcher reviews orders to identify how best to service them and communicates with agents "in the field" accordingly), 32:10–25, 47:28–32 (determining routes based on location of agent), 46:23–27 (distribution

centers geographically distributed so that agents may receive “new deliveries and routing instructions at any location”). After picking up the goods on the order manifest (i.e., “acquiring” them via the MDAS as recited in element 1.8), the delivery agent follows the route on their mobile device to deliver them to the customer’s location (element 1.9). *Id.* at 7:19–31 (goods delivered to “the destination address” based on planned route), 17:11–14, 45:14–20 (manifest used to collect and pick up orders for delivery).

In addition, both Park and Kim teach a MDAS having a camera, i.e., an “image capture device” (element 1.4). Ex. 1005, 48:10–20 (“delivery agent in the field” has “a mobile digital camera . . . capable of transmitting digital video through a third party network to the web server”); Ex. 1006, 2 (“delivery service provider’s mobile communication terminal equipped with a digital camera” to transmit “images in real time to the customer” via a server).⁹ Park teaches that the agent’s device provides the “customer with a live video feed of the delivery of their order.” Ex. 1005, 48:19–20. Kim teaches that, in addition to providing an image upon delivery, the delivery service provider or agent uses the camera on their device to take an image of the ordered product (element 1.5). Ex. 1006, Abstr., 3; Ex. 1038, Fig. 2 (step S11). The MDAS is then used to transmit the image over the Internet to the customer (element 1.6). Ex. 1006, Abstr., 3; Ex. 1038, Fig. 2 (steps S12 and S18). After viewing the image, the customer confirms the product by using their computer to send instructions to deliver the product to the delivery

⁹ The delivery agent devices in both Park and Kim meet the MDAS construction because they include at least: (1) a device to capture video or still images; and (2) a device set up to communicate with a remote server. *See supra* § III.C.i.

service provider's device (element 1.7). Ex. 1006, Abstr. (image sent so "customer can confirm whether the product ordered is identical to the product being delivered"), 3; Ex. 1038, Fig. 2 (arrow between S19 and S20). For these reasons, we credit Dr. Houh's testimony that the combination of Park and Kim teaches or suggests every element of claim 1 and the corresponding elements in claims 27 and 28. Ex. 1003 ¶¶ 60–108, 153–173.

Petitioner has also articulated a sufficient rationale for combining these elements of Park and Kim. *See* Pet. 20–23 (citing exhibits). Kim identifies a problem with purchasing a product from a website, i.e., that the product delivered to the customer may not match the images or videos of that product on the website. Ex. 1006, 2. Kim teaches this problem can be overcome by having the delivery service provider operate a MDAS to transmit an image of the actual product in real time to the customer so that after receiving the image the customer can send instructions back to the delivery service provider confirming that is the product they delivered. *Id.* We credit Dr. Houh's testimony that, based on these teachings, a POSITA would have been motivated to incorporate those same steps into Park's system and methodology to "enhance the reliability of the delivery," "increase customer satisfaction," and "save[] resources" by preventing the delivery of goods that, upon viewing, the customer might reject. Ex. 1003 ¶¶ 51–56.

Moreover, a POSITA would have had a reasonable expectation of success in combining these teachings because Park's system was already configured to send live video and images to the customer's computer. Ex. 1003 ¶ 57. Indeed, while Park primarily discusses transmission of video and images of the delivery process to the customer, it expressly teaches that

its objective is to “allow customers to interactively view, in real-time, the progress of his order, *from reception to compilation to delivery* though the route taken by the delivery agent.” Ex. 1005, 4:26–32 (emphasis added). Incorporating Kim’s teachings regarding elements 1.5–1.7 would further this objective, allowing the customer to interactively view images of the actual products compiled for delivery and send instructions back to the delivery agent regarding those products prior to delivery. *See* Ex. 1003 ¶ 57 (explaining that the combination allows Park’s system to perform the same intended functionality “in a more reliable way”).

Accordingly, Petitioner has shown that it would have been obvious to combine Park and Kim and that the asserted combination teaches or suggests all of the limitations of the independent claims. Patent Owner’s arguments to the contrary (*see* Resp. 21–49) are unavailing, as explained below.

First, Patent Owner contends that Park does not teach an “acquisition request” or “acquiring” goods as recited in the challenged claims. Resp. 21–24. According to Patent Owner, “[i]n Park’s system . . . a customer shops and purchases goods online via a merchant’s website” and “[t]he order is then ‘pushed’ to a warehouse fulfillment center” to collect the purchased goods. *Id.* at 22. Patent Owner contends “[t]his order is not an ‘acquisition request’ that can be fulfilled by Park’s delivery agent because the transaction is complete by the time the agent arrives to pick up already purchased packaged goods.” *Id.* at 23. Patent Owner similarly urges that Park does not teach an agent acquiring goods because “[w]hen a delivery agent only picks up and delivers an already purchased item, it does not acquire, or shop for, goods on the customer’s behalf.” *Id.* at 24.

These arguments are unavailing because they are premised on an incorrect construction of “acquisition request.” *See supra* § III.C.iii. As explained above, the ordinary meaning of acquire encompasses obtaining a product by picking it up for delivery and the Specification makes clear that the agent may “purchase *or otherwise* acquire” products for the customer. Ex. 1001, 5:4–6, 7:24–26, 7:50–58; Ex. 1042, 1; Ex. 1043, 1; Ex. 1044 ¶¶ 14–25. Accordingly, Park’s teaching of a delivery agent who picks up goods ordered by a customer on a website reads on these limitations.

Patent Owner’s argument that “Park’s distribution center . . . is not a shopping location” as recited in element 1.3 is similarly unavailing. Resp. 26–28. Park’s distribution centers are a shopping location because they contain the products available for purchase on the website accessed by the customer. *See id.*; Ex. 1044 ¶¶ 49–50 (explaining that “in Park, customers remotely shop for goods physically in the distribution center through the online interface”). Even assuming there is no brick-and-mortar storefront to these distribution centers, they are still a shopping location at which a customer can shop online. *See* Ex. 1044 ¶¶ 49–50.

Moreover, even if Park did not teach the recited “shopping location,” the combination of Park and Kim does. Kim teaches a “delivery service provider” operating a MDAS at a seller’s location to send a picture of the product requested by the customer so that the customer can confirm that they want that product before it is delivered. Ex. 1006, Abstr., 2–3. Thus, we agree with Petitioner, and credit Dr. Houh’s testimony, that “it would have been obvious for the delivery agent to be deployed to a ‘*fourth, shopping location*,’ whether that location is a distribution center or seller location.” Pet. 32; Ex. 1003 ¶ 81; Ex. 1044 ¶¶ 49–51.

Patent Owner attempts to distinguish Kim’s teachings by urging that Kim’s “‘delivery service provider’ is the merchant that accepts orders for goods and delivers them,” and therefore “there is no notion in Kim of an ‘agent,’ who shops for and purchases goods from the merchant on the customer’s behalf.” Resp. 18–19, 33–34 (citing Ex. 2016 ¶¶ 50–56, 80–81). We disagree.

Kim draws a distinction between a “seller” and a “delivery service provider.” Ex. 1006, 2–3; Ex. 1044 ¶¶ 35–37. As background, Kim explains that “a customer purchases a product either by visiting a seller in person or by ordering the product . . . without visiting the seller in person . . . whereby the seller has the ordered product delivered to the customer.” Ex. 1006, 2. But when describing the operation of its invention, Kim refers exclusively to a “delivery service provider” and not a “seller” or merchant. *Id.* at 3. It is this “delivery service provider” who obtains the image of the product on their MDAS, transmits it to the customer, and receives instructions back from the customer’s computer confirming the product. *Id.*; *see also* Ex. 1038, Fig. 2. There is nothing in Kim that suggests the delivery service provider must be the same entity that actually sells the ordered product. *See* Ex. 2017, 167:11–170:17 (Dr. Houh testifying credibly on cross-examination that a POSITA would understand Kim’s delivery service provider could provide delivery from multiple different stores and is not limited to the seller). Indeed, the term “delivery service provider” itself suggests an entity that provides delivery services as opposed to the merchant who sells goods. Thus, even if Kim does not expressly state that the seller and delivery service provider are two separate entities, it reasonably suggests a delivery agent distinct from the seller who travels to the seller’s location to

shop on the customer's behalf. *See KSR*, 550 U.S. at 421 (“A person of ordinary skill is also a person of ordinary creativity, not an automaton.”). For these reasons, the restrictive interpretation of Kim advanced by Patent Owner and Dr. Mitzenmacher (Ex. 2016 ¶¶ 50–56, 80–81) is not credible.

Patent Owner's argument that the combination of Park and Kim does not teach transmitting the image of the goods (element 1.6) “before” acquiring them (element 1.8) is also unavailing. *See Resp.* 25–26. According to Patent Owner, in Park and Kim “the images of the goods are taken only after the transaction is complete” and therefore neither reference “discloses an agent transferring any images . . . *before* acquiring the goods.” *Id.* at 25. However, that argument erroneously equates the customer ordering a product over a website with the agent acquiring the goods for delivery. In Petitioner's asserted combination, the agent uses their MDAS to transmit an image of the product to the customer and, after receiving the image, the customer sends instructions back to the agent to confirm the product, thereby causing the agent to acquire the goods for delivery. Accordingly, Park and Kim teach a method in which element 1.6 occurs *before* element 1.8.¹⁰

Patent Owner's arguments that the combination of Park and Kim do not teach transmitting images of the goods with the MDAS to the customer because those images are sent through a server are also unavailing. *See Resp.* 30–32. There is nothing in the language of the challenged claims that

¹⁰ The parties dispute whether the claims require this ordering. *See Reply* 5, 9–10 (“the steps may be met by prior art teaching the steps in any order”); *Sur-reply* 9–10 (“[t]he claims and specification require that the step of transferring an image of goods to a customer occurs *before* acquiring the goods”). We need not resolve that issue because the combination of Park and Kim discloses the ordering under Patent Owner's narrower interpretation.

excludes transmitting images to the customer via a server. Moreover, the preferred embodiment in Figure 1 of the Specification depicts communication between the customer computer (30) and mobile delivery agent system (42) occurring through a server (14) accessed via the Internet (18). Ex. 1001, Fig. 1, 3:9–14 (“Server 14 is in contact with a plurality of mobile delivery agent systems”); *see also id.* at 5:33–38 (communication between customer and delivery agent occurs “through a . . . internet connection”). In addition, the Specification states that video from the real-time video device in the MDAS is “preferably” transmitted to and stored on server 14. *Id.* at 8:22–30; *see also* Ex. 1044 ¶¶ 60–62 (explaining that the “Park’s disclosure of an intervening web server with which the customer interacts” is consistent with the embodiments in the Specification). Thus, there is no basis for Patent Owner to distinguish the challenged claims based on either Park’s teaching that its “live video feed” is presented by a “web server . . . over the Internet” (Ex. 1005, 48:10–20) or Kim’s description of the image of the product being sent and stored on a server from which the customer receives the image (Ex. 1006, 3 (steps 1–3); Ex. 1038, Fig. 2 (S12–S18)).

Patent Owner also raises several challenges to Petitioner’s reasoning for combining Park and Kim. *See* Resp. 32–41. As an initial matter, Patent Owner argues that Petitioner’s rationale for the combination is flawed because Kim’s “delivery service provider” is actually the seller from which the products are ordered. *See id.* at 33–34. As explained above, we do not agree with that overly restrictive interpretation of Kim and instead find that Kim teaches or reasonably suggests a delivery agent operating a MDAS to

obtain and transmit a product image to the customer and receive instructions back.

Patent Owner further contends that “modifying Park’s warehouse-based delivery model as suggested in the Petition would impermissibly alter Park’s principle of operation as viewed through the lens of its contribution to the art.” Resp. 35. According to Patent Owner, Kim’s teaching of an agent that obtains an image of the product could not be factored into Park’s system because Park’s goods are already packaged by the time the delivery agent picks them up. *Id.* at 35–38. Patent Owner asserts that the additional time required to unpackage the goods, transmit an image, await customer confirmation, and then repackage the goods for delivery would alter Park’s inventive concept by destroying its basic objective of one-hour delivery. *Id.* at 39–41.

Again, we disagree with Patent Owner. As Petitioner points out, Park’s system and method is not limited to one-hour delivery. *See* Reply 19. To the contrary, Park teaches that items can be “delivered within the hour *or* within a customer specified delivery window” exceeding an hour. Ex. 1005, Abstr. (emphasis added), 20:9–12 (describing “processing orders for deferred delivery (i.e. those not required to be delivered in the next hour)”); *see also* Ex. 1044 ¶ 29. Moreover, while Park does place an emphasis on delivery time, it explains that the goal of such is to promote customer satisfaction. *See* Ex. 1005, 30:16–18 (increasing “dispatch efficiency and customer satisfaction”), 34:5–7 (resequencing delivery “to ensure 100% customer satisfaction”). In this regard, the rationale Petitioner articulates for combining the references dovetails with Park’s objective of improving customer satisfaction by ensuring that the product to be delivered is

acceptable to the customer. *See* Ex. 1044 ¶ 71 (“[A] POSITA would have understood that a customer ordering goods would care little if an unacceptable product was delivered quickly.”).

Patent Owner’s arguments also overstate the impact the combination would have on Park’s delivery time. Much of Patent Owner’s argument and Dr. Mitzenmacher’s testimony interpreting Park is premised on the “e-Dreams film”¹¹ and other exhibits relating to the “Kozmo.com system,” which Patent Owner argues is the system disclosed in Park. *See* Resp. 14–17, 37–41; Sur-reply 18–19; Ex. 2016 ¶¶ 47, 87, 88–89 (citing Exs. 2023–2029). At most, these materials reflect a commercial implementation of some aspects of Park’s system and do not limit the teachings in Park itself, nor do they evidence how a POSITA would have approached the combination of Park and Kim in the Petition.

Patent Owner’s argument that Park’s delivery agent would have to unpackage “meticulously packaged” goods, wait for confirmation, and then repack them is not supported by the actual teachings in Park. *See* Resp. 35–36 (citing Ex. 2016 ¶ 84). Park teaches that products at the distribution center are placed into “bags suitable for being carried by a delivery agent to the customer’s delivery location.” Ex. 1005, 16:24–28; Ex. 1044 ¶ 32. It is well within the exercise of a POSITA’s ordinary creativity to combine the references, such that Park’s delivery agent would take a picture of the

¹¹ According to Patent Owner, the e-Dreams film is a “documentary film (2002), *available at* <<https://www.youtube.com/watch?v=j847rYNo2G0>>.” Resp. 17. Although Patent Owner’s briefing includes what appear to be screenshots from that video, the video itself was not filed as an exhibit. *See, e.g., id.* at 17, 37. Accordingly, the e-Dreams film is not record evidence, but, even if it were, our findings would remain the same.

product, either in the bag, or by removing and then putting it back in the bag while waiting for customer confirmation, or even modifying the packaging process to facilitate delivery agent taking a picture before putting the products into the bag. Ex. 1044 ¶¶ 73–74. Although this would add some time to the process, we credit Dr. Houh’s testimony that the delay would be relatively small and offset by other benefits, e.g., enhanced reliability and customer satisfaction, or mitigated by providing the confirmation as an “option” to the customer along with an advisory message that such confirmation “may add time to his or her order.” Ex. 1003 ¶¶ 56–58; *see also* Ex. 1044 ¶¶ 71–86 (replying to Dr. Mitzenmacher’s testimony). In contrast, Dr. Mitzenmacher’s competing testimony is less credible because it overemphasizes Park’s focus on one-hour delivery, while largely ignoring the benefits a POSITA would have understood the combination of Park and Kim to provide. *See* Ex. 2016 ¶¶ 83–104.

Finally, Patent Owner’s arguments that “Petitioner fails to square Park’s warehouse-based model with Kim’s technique to show *how* the specific modification would even work” or “*would be* factored into Park’s intelligent routing algorithm” are unavailing. *See* Resp. 41–49. Patent Owner’s arguments do not reflect the proper inquiry because they focus on features of Park that are not required by the challenged claims. *Axonics, Inc. v. Medtronic Inc.*, 73 F.4th 950, 957 (Fed. Cir. 2023) (“The inquiry is not whether a relevant artisan would combine a first reference’s feature with a second reference’s feature to meet the requirements of the first reference that are not requirements of the claims at issue.”). Put differently, the test is not whether Kim’s product confirmation technique may be “bodily incorporated” into Park’s system, but rather whether a POSITA would have

been motivated to combine the teachings to achieve the claimed invention, recognizing that some ordinary creativity might be required to carry out that combination. *See Facebook Inc. v. Windy City Innovations LLC*, 973 F.3d 1321, 1343 (Fed. Cir. 2020). As explained above, Petitioner’s showing is sufficient to demonstrate such and includes credible testimony from Dr. Houh explaining how a POSITA would implement the proposed combination to arrive at the method in the challenged claims. *See* Ex. 1003 ¶¶ 51–59.

For these reasons, Petitioner has demonstrated by a preponderance of the evidence that claims 1, 27, and 28 would have been obvious over Park and Kim.

ii. Claim 2

Claim 2 depends from claim 1 and additionally recites that the MDAS “includes a global position system” that sends the customer “location information based on signals from the global positioning system.” Ex. 1001, 10:44–49. For these additional limitations, Petitioner relies on Park’s teaching that the delivery agent’s mobile computing device has “a global position indicator system for determining the physical location of the agent.” Pet. 39 (citing Ex. 1005, 47:12–48:8; Ex. 1003 ¶¶ 111–113).

Patent Owner does not dispute Petitioner’s showing for claim 2 separately from its arguments for claim 1.¹²

Petitioner’s showing is sufficient to establish that claim 2 would have been obvious over Park and Kim. Park teaches that the agent’s MDAS is

¹² To the extent Patent Owner’s arguments for claim 1 also apply to the dependent claims, those arguments are unavailing for the same reasons explained above. *See supra* § III.E.i.

“GPS-enabled” and “periodically indicates the delivery agent’s location using wireless communications.” Ex. 1005, 47:30–32. Park also teaches that this information “may be provided to the customer” so that they can view the current location of their delivery. *Id.* at 47:32–48:3; *see also* Ex. 1003 ¶¶ 111–113. Accordingly, Petitioner has shown that the articulated combination of references teaches or suggests all of the limitations of claim 2.

iii. Claim 5

Claim 5 depends from claim 1. It further recites “after receiving the first acquisition request, calculating which of a plurality of delivery agent systems could most efficiently carry out” the request based at least on “the location having the first set of one or more goods, a current location of at least one of the plurality of delivery agent systems and the delivery site.” Ex. 1001, 10:57–64. For these additional limitations, Petitioner relies on Park’s teachings regarding its order dispatching system. *See* Pet. 40–42 (Ex. 1005, 12:22–29, 25:6–9, 28:13–19, 28:25–29:14, 32:10–21, 33:14–20, 34:10–26; Ex. 1003 ¶¶ 114–124).

Patent Owner does not dispute Petitioner’s showing for claim 5 separately from its arguments for claim 1.

Petitioner’s showing is sufficient to establish that claim 5 would have been obvious over Park and Kim. In Park’s system, a “dispatcher operates the order dispatching system and reviews currently executing deliveries to identify how best to service the newly received orders.” Ex. 1005, 25:6–9. This includes “determining which delivery agent out of a pool of available delivery agents will be assigned to deliver the item delivery orders.” *Id.* at 12:22–25. Park teaches that this is accomplished by determining “the fit of

the order delivery into the agent's schedule . . . prior to selection of the agent" and includes a calculation of "the optimal route for delivery." *Id.* at 5:1–6, 28:13–19. Moreover, Park teaches that its delivery route calculation considers, *inter alia*, the delivery agent's current position, the distance from the dispatch location where the goods will be picked up and the delivery zone. *See id.* at 28:25–29:13, 32:19–21; *see also* Ex. 1003 ¶¶ 114–124. Accordingly, Petitioner has shown that the articulated combination of references teaches or suggests all of the limitations of claim 5.

iv. Claim 12

Claim 12 depends from claim 1. It further recites "receiving a second acquisition request from a second customer for a second set" of goods, "electronically transmitting an image" of the second set of goods to the second customer, "acquiring" the second set of goods via the delivery agent system, and "delivering" the second set of goods. Ex. 1001, 11:24–33. Because these limitations are substantially similar to limitations in claim 1, but for a second customer and second set of goods, Petitioner relies on Park's teaching of multiple acquisition requests and its showing for claim 1. *See* Pet. 42–44 (citing Ex. 1005, Fig. 2A; Ex. 1003 ¶¶ 125–129).

Patent Owner does not dispute Petitioner's showing for claim 12 separately from its arguments for claim 1.

Petitioner's showing is sufficient to establish that claim 12 would have been obvious over Park and Kim. As explained above, the combination of Park and Kim teach limitations 1.1, 1.6, 1.8, and 1.9, which correspond to the steps recited for the second acquisition request in claim 5. *Supra* § III.E.i. Moreover, Park teaches a system and method for handling orders from multiple customers. *See, e.g.*, Ex. 1005, Fig. 2A (manifest showing

orders from different customers). Thus, it would have been obvious to perform the same steps for a second acquisition request, as recited in claim 12. Ex. 1003 ¶¶ 125–129. Accordingly, Petitioner has shown that the articulated combination of references teaches or suggests all of the limitations of claim 12.

v. *Claim 14*

Claim 14 depends from claim 1 and additionally recites “checking the one or more goods off an electronic shopping list in real-time as each of the one or more goods is acquired.” Ex. 1001, 11:37–39. For this additional limitation, Petitioner relies on Park’s teaching regarding order pickers pulling items from stock. *See* Pet. 44–46 (citing Ex. 1005, 23:15–22, Ex. 1003 ¶¶ 132–134).

Patent Owner separately disputes Petitioner’s showing for claim 14. Resp. 50–54. According to Patent Owner, there are “two dispositive problems with Petitioner’s theory.” *Id.* at 51. First, Patent Owner argues that it is “order picker personnel” in Park’s warehouse that fulfill orders and not the delivery agents who “check them off in real-time as they are acquired, as required by the Challenged Claims.” *Id.* at 51–53. Second, Patent Owner urges that items gathered by the order picker personnel are “placed in pending mode” and “only provisionally pulled from stock as they have yet to be paid for.” *Id.* at 53. “Because in the pending mode the items in the order are not complete and paid for,” Patent Owner contends “they are not acquired such to check off an electronic shopping list in real-time as each of the one or more goods is acquired as the dependent claim requires.” *Id.* at 53–54 (citing Ex. 2016 ¶ 110) (internal quotations omitted).

In reply, Petitioner argues that claim 14 does not require that the delivery agent be the one to check the goods off a list. Reply 23. According to Petitioner, “acquired” in “claim 14 is not the same ‘acquiring’ by the agent in independent claim 1.” *Id.* Thus, regarding Patent Owner’s first argument, Petitioner urges “it is immaterial whether Park’s order picker checks off the individual goods in the process of acquisition, while the delivery agent acquires the ‘set’ of goods in a bag.” *Id.* at 23–24. Regarding Patent Owner’s second argument, Petitioner reiterates that “acquisition of goods does not require payment” and “[t]hus, it is irrelevant to claim 14 that ‘in the ‘pending mode’ the items in the order are not ‘complete and paid for.’” *Id.* at 24 (quoting Resp. 53).

Patent Owner sur-replies that “[c]laim 14 is limited to the agent because checking the goods off an electronic shopping list must occur in *real-time* as the goods are acquired via the agent.” Sur-reply 22. Moreover, Patent Owner argues that even if claim 14 “could be read broadly . . . to cover two different actors,” Park’s order pickers “do not perform any of the actions necessary to acquire goods according to any of the parties’ dictionary definitions or the intrinsic evidence.” *Id.* at 23.

Petitioner has the better position. Claim 14 adds a step to claim 1, i.e., “checking the one or more goods off an electronic shopping list in real-time as each of the one or more goods is acquired.” Ex. 1001, 11:37–40. This claim language does not specify who performs the step, i.e., the person who checks each item off the list in real-time as it is acquired, nor does it require the goods to be acquired “via the mobile delivery agent system” as does element 1.7. Moreover, element 1.7 refers to acquiring an entire “set” of goods, whereas claim 14 recites checking off “each of the one or more

goods” as it is acquired. This distinction further supports Petitioner’s position that the additional step of checking off each good as it is acquired in claim 14 need not be the same step of acquiring the set of goods in element 1.7 and thus that claim 14 encompasses two different actors, i.e., Park’s order picker and delivery agent, performing those steps.

Moreover, Petitioner has shown that Park teaches an order picker who performs the additional step recited in claim 14. Park teaches its system can “provide a view of the items selected to the order pickers at the appropriate distribution center . . . in real time, such that items in the order may be provisionally pulled from stock and placed in a pending mode” as they are selected by the customer. Ex. 1005, 23:15–22. We credit Dr. Houh’s testimony that a POSITA would have understood that this view of items is an electronic shopping list and that the order pickers check off each of the items on that list as they pull them from stock and place them in pending mode. Ex. 1003 ¶ 131. We also credit his testimony that even if Park did not expressly disclose checking items off an electronic shopping list such functionality was well-known and would have been obvious to a POSITA. *See id.* ¶¶ 132–135 (citing references).

Patent Owner’s argument that the pending items are not acquired because they are not paid for is unavailing. As explained above, acquiring is not limited to purchasing and encompasses picking up items so that they can later be delivered to the customer. *See supra* § III.E.i. Thus, Park teaches or suggests that each item on the list is “acquired,” as recited in claim 14, when the order picker pulls it from stock and places it in pending mode. *See* Ex. 1003 ¶¶ 130–131. Accordingly, Petitioner has shown that the articulated

combination of references teaches or suggests all of the limitations of claim 14.

vi. Claim 18

Claim 18 depends from claim 1 and additionally recites “wherein the step of electronically transmitting an image comprises streaming real-time video.” Ex. 1001, 11:56–58. For this limitation, Petitioner relies on Park’s teaching that the delivery agent’s device transmits a “live video feed” that the customer can view in “real-time.” Pet. 46 (citing Ex. 1005, 48:10–21, 4:26–32; Ex. 1003 ¶¶ 136–138).

Patent Owner does not dispute Petitioner’s showing for claim 18 separately from its arguments for claim 1.

Petitioner’s showing is sufficient to establish that claim 18 would have been obvious over Park and Kim. Park teaches that the agent’s MDAS has a camera capable of transmitting a “live video feed.” Ex. 1005, 48:10–21. We agree with Petitioner that based on the combination of Park and Kim it would have been obvious to use this live video feed to transmit a video of the product as part of Park’s overall objective of allowing the customer to “interactively view, in real-time, the progress of his order, from reception to compilation to delivery.” Ex. 1005, 4:26–32; *see also* Ex. 1003 ¶¶ 136–138. Accordingly, Petitioner has shown that the articulated combination of references teaches or suggests all of the limitations of claim 18.

vii. Claim 19

Claim 19 depends from claim 1 and additionally recites “deploying a plurality of delivery agent systems to various geographic locations.” Ex. 1001, 11:59–61. For this limitation, Petitioner relies on Park’s teachings regarding the deployment of multiple delivery agents as depicted in Park’s

Figure 3. *See* Resp. 46–48 (citing Ex. 1005, Fig. 3, 5:15–21, 25:15–19, 30:6–8, 45:14–32, 64:19–21; Ex. 1003 ¶¶ 139–142).

Patent Owner does not dispute Petitioner’s showing for claim 19 separately from its arguments for claim 1.

Petitioner’s showing is sufficient to establish that claim 19 would have been obvious over Park and Kim. As explained above, Park teaches a plurality of delivery agents that receive instructions from a dispatcher via a MDAS. *See, e.g.*, Ex. 1005, 12:22–25, 30:6–8. Figure 3 of Park depicts a plurality of agents A, B, and C deployed to different geographic locations. *Id.* at Fig. 3, 45:21–32; *see also* Ex. 1003 ¶¶ 139–142. Accordingly, Petitioner has shown that the articulated combination of references teaches or suggests all of the limitations of claim 19.

viii. Claim 25

Claim 25 depends from claim 1 and additionally recites that “the first acquisition request includes a fast delivery request, and wherein a selection of the delivery agent system is based, at least in part, on the fast delivery request.” Ex. 1001, 12:15–18. For this limitation, Petitioner relies on Park’s teaching regarding perishable items that need to be delivered in a time sensitive manner. Pet. 48–49 (citing Ex. 1005, 1:11–21, 25:29–26:11, 27:29–28:2, 28:25–29:5; Ex. 1003 ¶¶ 143–148).

Patent Owner separately disputes Petitioner’s showing for claim 25. Resp. 58. According to Patent Owner, Petitioner has not shown how the disclosure it cites “equates to a selection of delivery agents based on the alleged ‘fast delivery request.’” *Id.* We disagree.

Petitioner’s showing is sufficient to establish that claim 25 would have been obvious over Park and Kim. Park teaches that its system and

method is capable of delivering “perishable items such as ice cream and hot meals . . . in an extremely time-sensitive manner.” Ex. 1005, 1:11–21. Such “immediately deliverable orders are integrated into the existing schedule of agents in the field” with “[p]erishable deliveries . . . arranged toward the beginning of the route.” *Id.* at 26:1–10; *see also id.* at 27:29–8:2 (teaching that if the order includes perishable items, the time to deliver is shortened). Based on these teachings, a POSITA would have understood that “when a customer orders a set of items . . . that includes a perishable item having a short usable life, like ice cream, such an acquisition requests therefore includes . . . a ‘*fast delivery request*’ as it shortens the time to deliver.” Ex. 1003 ¶ 145. Moreover, Park teaches that the delivery agent is selected based on this fast delivery request because such immediately deliverable orders are assigned to agents already in the field and prioritized toward the beginning of their route. Ex. 1005, 26:1–10; Ex. 1003 ¶¶ 147–148. Accordingly, Petitioner has shown that the articulated combination of references teaches or suggests all of the limitations of claim 25.

ix. Claim 26

Claim 26 depends from claim 1 and additionally recites the steps of “storing purchase history of the first customer” and “suggesting purchases to the first customer based on the purchase history.” Ex. 1001, 12:19–22. For this limitation, Petitioner relies on Park’s teachings regarding the use of a customer’s transaction history. Pet. 49–50 (citing Ex. 1005, 6:9–12, 19:2–7, 22:4–6, Ex. 1003 ¶¶ 149–152).

Patent Owner does not dispute Petitioner’s showing for claim 26 separately from its arguments for claim 1.

Petitioner’s showing is sufficient to establish that claim 26 would have been obvious over Park and Kim. Park teaches that a customer’s purchase history is stored in a customer profile that may be reviewed for future orders. Ex. 1005, 6:9–12. In addition, Park teaches that this profile may be used to determine promotional items in the customer’s order or to recommend products related to previous purchases. *Id.* at 19:2–7, 22:4–6; *see also* Ex. 1003 ¶¶ 149–152. Accordingly, Petitioner has shown that the articulated combination of references teaches or suggests all of the limitations of claim 26.

F. Ground 2: obviousness over Park, Kim, and Hileman

Petitioner contends claims 3, 4, 9, and 24 would have been obvious over the combination of Park and Kim in Ground 1 with further modification in view of Hileman. *See* Pet. 51–60. As explained below, Petitioner has shown by a preponderance of the evidence that these claims would have been obvious over the asserted combination of these references.

The Petition articulates reasoning for combining Hileman with Park and Kim. Pet. 52–55. More specifically, Petitioner argues that it would have been obvious “to apply Hileman’s teachings of providing delivery option and charge information, the ability to select a delivery agent, and delivery agent availability, to the Park and Kim combination—for example, to further Park’s goals of providing advanced order tracking information and customer interactivity.” *Id.* at 52 (citing Ex. 1003 ¶ 175, Ex. 1005, 49:13–17) (internal quotations omitted). According to Petitioner, a POSITA would have been motivated to incorporate Hileman’s teachings “because doing so would have provided additional information and flexibility to the customer” and “allowed the system of Park to serve a larger number of customers” by

providing “delivery options that vary in price” and “price estimates before completing a transaction.” *Id.* at 53–54 (citing Ex. 1003 ¶¶ 177–179).

Petitioner also cites evidence supporting that a POSITA would have had a reasonable expectation of success in making this combination. *Id.* at 54–55 (citing Ex. 1003 ¶ 180).

Patent Owner does not specifically respond to Petitioner’s reasoning for combining Hileman with Park and Kim. *See generally* Resp.

We find Petitioner’s argument and evidence above credible to show that it would have been obvious to combine the identified features Hileman with the combination of Park and Kim in Ground 1. Below, we address the application of those references’ teachings to each of the limitations recited in claims 3, 4, 9, and 24.

i. Claim 3

Claim 3 depends from claim 2 and additionally recites “wherein the information on the delivery agent system includes an availability status of the delivery agent system.” Ex. 1001, 10:50–52. For this limitation, Petitioner relies on Park’s and Hileman’s teachings regarding the availability of delivery agents. Pet. 55–56 (citing Ex. 1003 ¶¶ 182–185; Ex. 1005, 28:13–19, 32:11–14, 49:13–17; Ex. 1009, Abstr., ¶¶ 30, 35).

Patent Owner does not dispute Petitioner’s showing for claim 3 separately from its arguments for claim 1.

Petitioner’s showing is sufficient to establish that claim 3 would have been obvious over Park, Kim, and Hileman. Park teaches that its system “determines the availability times for all delivery agent on staff at any time.” Ex. 1005, 32:12–14. Hileman similarly teaches tracking and updating “availability information” for a variety of delivery vehicles and options. Ex.

1009 ¶ 30. Based on these teachings it would have been obvious to include an availability status as recited in claim 3 in Park’s delivery agent system. *See* Ex. 1003 ¶¶ 182–185. Accordingly, Petitioner has shown that the articulated combination of references teaches or suggests all of the limitations of claim 3.

ii. Claim 4

Claim 4 depends from claim 1 and additionally recites that “the first acquisition request . . . includes a selection of the delivery agent system for fulfilling the first acquisition request.” Ex. 1001, 10:53–56. For this limitation, Petitioner relies on Park’s disclosure of multiple transportation types and Hileman’s teaching allowing customers to select different delivery options. Pet. 56–57 (citing Ex. 1003 ¶¶ 186–188; Ex. 1005, 37:14–21, 42:13–16, 45:23–25; Ex. 1009 ¶¶ 28, 45).

Patent Owner does not dispute Petitioner’s showing for claim 4 separately from its arguments for claim 1.

Petitioner’s showing is sufficient to establish that claim 4 would have been obvious over Park, Kim, and Hileman. Park teaches that the agents operating its MDAS devices utilize multiple transportation types with varying speeds and delivery times. Ex. 1005, 37:17–21, 42:13–16, 45:23–25. Hileman teaches allowing the customer to choose from multiple transportation options when they submit a transportation request. Ex. 1009, Abstr., ¶¶ 28, 45. Based on these teachings, it would have been obvious to incorporate Hileman’s teachings to allow the customer to select from different delivery agent options (e.g., to choose between Park’s agents providing different delivery speeds or transportation types) when they submit their acquisition request. Ex. 1003 ¶¶ 186–188 (citing related

teachings in Park). Accordingly, Petitioner has shown that the articulated combination of references teaches or suggests all of the limitations of claim 4.

iii. Claim 9

Claim 9 depends from claim 1 and additionally recites the steps of “calculating a price estimate based on the first acquisition request” and “providing the price estimate to the first customer.” Ex. 1001, 11:11–14. For these limitations, Petitioner relies on Park and Hileman’s teachings regarding price estimates and delivery options. Pet. 58–59 (citing Ex. 1003 ¶¶ 189–195; Ex. 1005, 17:24–26, 17:32–18:5; Ex. 1009 ¶¶ 28, 45).

Patent Owner separately disputes Petitioner’s showing for claim 9. Resp. 54–55. Patent Owner argues that “the combination of Park-Kim does not teach or suggest the claimed ‘acquisition request,’ much less ‘calculating’ and ‘providing’ a price estimate based on the acquisition request.” *Id.* at 54. According to Patent Owner, “[i]n Park, a price estimate is calculated and provided to the customer upon checkout via the traditional checkout methodology.” *Id.* Patent Owner contends that “Hileman, similar to Park, is directed to . . . ordering goods via a merchant’s website” and the charges Petitioner refers to in Hileman are “the ‘charges associated with the various available routes of travel,’ not the acquisition of those goods by a delivery agent.” *Id.* at 54–55 (quoting Ex. 1009, Abstr., ¶¶ 32, 45).

In Reply, Petitioner urges that Patent Owner’s argument for claim 9 is “based entirely” on its narrow construction of acquisition request and that even Patent Owner agrees Park teaches providing a price estimate upon checkout. Reply 24.

Petitioner has the better position. Patent Owner acknowledges that its argument for claim 9 requires the application of its construction for “acquisition request.” Sur-reply 23 (“[W]hen the correct construction is applied, the combination does not reach the claims.”). We have, however, rejected that construction. *Supra* § III.C.iii. Thus, claim 9, like the other challenged claims, encompasses an acquisition request placed on a website by a customer (e.g., the customer’s order in Park) and later acquired by an agent operating a MDAS who picks up the goods ordered by the customer for delivery. *Supra* § III.E.i. Regarding the additional steps recited in claim 9, there is no dispute that Park teaches calculating and providing a price estimate upon checkout. Ex. 1003 ¶¶ 189–191, 193–195; Ex. 1005, 17:24–26, 17:32–18:5; Resp. 54 (admitting same). Hileman similarly teaches calculating and providing a price estimate to the customer. Ex. 1003 ¶ 192; Ex. 1009 ¶¶ 28, 45. Accordingly, Petitioner has shown that the articulated combination of references teaches or suggests all of the limitations of claim 9.

iv. Claim 24

Claim 24 depends from claim 1 and additionally recites “sending a text message to or initiating a voice communication with the first customer when the delivery agent is near the first shopping location.” Ex. 1001, 12:11–14. For this limitation, Petitioner relies on teachings in Park and Hileman. Pet. 60 (citing Ex. 1003 ¶¶ 196–199; Ex. 1005, 4:26–32, 7:4–7, 47:25–48:8; Ex. 1009 ¶ 46).

Patent Owner does not dispute Petitioner’s showing for claim 24 separately from its arguments for claim 1.

Petitioner's showing is sufficient to establish that claim 24 would have been obvious over Park, Kim, and Hileman. Hileman teaches sending a message to the user, either by voice or an electronic notification, when the delivery vehicle approaches the pick-up location. Ex. 1009 ¶ 46. We credit Dr. Houh's testimony that it would have been obvious to incorporate a similar step into the combination of Park and Kim, particularly as this would further Park's stated objective of allowing a customer to view the current location of the delivery agent and track the progress of their order from start to finish. Ex. 1003 ¶¶ 196–199 (citing Ex. 1005, 4:26–32, 7:4–7). Accordingly, Petitioner has shown that the articulated combination of references teaches or suggests all of the limitations of claim 24.

G. Ground 3: obviousness over Park, Kim, and Mault

Petitioner contends claim 21 would have been obvious over the combination of Park and Kim in Ground 1 with further modification in view of Mault. *See* Pet. 60–65. As explained below, Petitioner has shown by a preponderance of the evidence that claim 21 would have been obvious over these references.

Claim 21 depends from claim 1 and additionally recites the steps of “receiving one or more images of the first set of one or more goods from the first customer” and “identifying the first set of one or more goods based on the one or more images.” Ex. 1001, 11:65–12:2. For these additional limitations, Petitioner relies on Mault's teaching of a PDA device used to send an image of a product to be purchased to a service provider who then identifies the product through computer analysis of the image. Pet. 64–65 (citing Ex. 1003 ¶¶ 210–216; Ex. 1016 ¶¶ 83, 86, 98).

The Petition articulates reasoning for combining the identified teachings in Mault with Park and Kim. Pet. 61–64. More specifically, Petitioner contends it would have been obvious to combine “Mault’s technique of using an image-sensing device to order products” with Park and Kim “to provide a technique for ordering products that Mault acknowledges provides particularly beneficial results.” *Id.* at 61–62 (citing Ex. 1003 ¶ 202; Ex. 1016 ¶ 19). Moreover, Petitioner argues “a POSITA would have been specifically motivated to” make this combination because doing so would “address a known issue in one of Park’s example implementations.” *Id.* at 62. According to Petitioner, Park teaches that the customer’s computer may be a handheld device, but a POSITA at the time “would have recognized that inputting data into a handheld device was difficult.” *Id.* (citing Ex. 1003 ¶¶ 204–205; Ex. 1025 ¶ 5). Petitioner urges that “alternative input modalities” such as Mault’s use of “an image-sensing means to assemble a shopping list and order items . . . would mitigate this known issue and would have been desirable.” *Id.* at 63 (citing Ex. 1016 ¶¶ 49, 59). Petitioner also cites evidence supporting that a POSITA would have had a reasonable expectation of success in making this combination. *Id.* at 63–64 (citing Ex. 1003 ¶¶ 207–208).

Patent Owner does not specifically respond to Petitioner’s reasoning for combining Mault with Park and Kim, nor otherwise dispute Petitioner’s showing for claim 21 separately from its arguments for claim 1. *See generally* Resp.

Petitioner’s showing is sufficient to establish that claim 21 would have been obvious over Park, Kim, and Mault. Mault describes a PDA device that sends an image of food item to a remote server where image

processing techniques are used to identify the item in the image. Ex. 1016 ¶¶ 83, 86. Mault also teaches the use of this technique to prepare shopping lists and “order goods and services over a communication network.” *Id.* ¶ 98. Thus, Mault teaches the additional steps recited in claim 21. Ex. 1003 ¶¶ 211–216.

Moreover, Petitioner has also articulated sufficient reasoning with rational underpinning for combining Mault’s teachings with Park and Kim. In particular, we credit Dr. Houh’s testimony that a POSITA would have understood that Mault’s image-sensing technique would have mitigated a known problem with handheld devices by making it easier for the customer to order a product. Ex. 1003 ¶¶ 205–206. Accordingly, Petitioner has shown that the articulated combination of references teaches or suggests all of the limitations of claim 21.

H. Ground 4: obviousness over Park, Kim, and Pugliese

Petitioner contends claims 8, 22, and 23 would have been obvious over the combination of Park and Kim in Ground 1 with further modification in view of Pugliese. *See* Pet. 65–72. As explained below, Petitioner has shown by a preponderance of the evidence that these claims would have been obvious over the asserted combination of these references.

The Petition articulates reasoning for combining Pugliese with Park and Kim. Pet. 66–69. More specifically, Petitioner argues that it would have been obvious “to apply Pugliese’s teachings of providing an image of a selected product to a customer in response to an instruction from the customer or the combination of Park and Kim, to further Park’s goals of providing the customer the ability to interactively view, in real-time, the progress of his order and the most advanced order tracking information

available.” *Id.* at 66 (citing Ex. 1003 ¶ 218; Ex. 1005, 4:27–32, 49:13–17) (internal quotations omitted). According to Petitioner, a POSITA would have been motivated to incorporate Pugliese’s teachings “because doing so would add interactivity to the system of Park” and “would have provided the ability for the customer to specify an inspection option, and thereby allow the image to be provided at the customer’s option (instead of, for example, each time an order was placed).” *Id.* at 67 (citing Ex. 1003 ¶¶ 220–221; Ex. 1010 ¶¶ 34, 427). In addition, Petitioner contends a POSITA would have “been motivated to incorporate Pugliese’s offering of suggestions and alternative products, because doing so would increase the likelihood that a customer ordered from the provider even in the case of a good being rejected, instead of abandoning the shopping event entirely.” *Id.* (citing Ex. 1003 ¶ 221). Petitioner also cites evidence supporting that a POSITA would have had a reasonable expectation of success in combining these teachings with Park and Kim. *Id.* at 68–69 (citing Ex. 1003 ¶ 223).

We find Petitioner’s argument and evidence above credible to show that it would have been obvious to combine the identified features in Pugliese with the combination of Park and Kim in Ground 1. Below, we address Patent Owner’s arguments to the contrary and the application of the references’ teachings to the limitations recited in claims 8, 22, and 23.

i. Claim 8

Claim 8 depends from claim 1 and additionally recites “receiving instructions from the first customer using the communication device to remotely inspect the first set of one or more goods utilizing the image capture device.” Ex. 1001, 11:7–10. For this limitation, Petitioner relies on teachings in Park and Kim as well as Pugliese’s teachings relating

dynamically displaying images of items in response to customer instructions. Pet. 69–70 (citing Ex. 1003 ¶¶ 225–229; Ex. 1005, 4:26–32; Ex. 1006, 2; Ex. 1010, claim 1, ¶¶ 8, 146, 167, 178).

Patent Owner separately disputes Petitioner’s showing for claim 8. Resp. 55–56. According to Patent Owner, “the proposed Park-Kim-Pugliese combination and alleged rationale suffer from the same deficiencies” urged for Ground 1. *Id.* at 55. That is, Patent Owner contends, “Park’s warehouse-based delivery model in which delivery agents undertake a grab-and-go delivery operation does not allow for taking images of the actual goods, let alone waiting for instructions from a customer for remote inspection of the goods that have already been packaged.” *Id.* at 55–56.

In reply, Petitioner points out that Patent Owner “presents no distinct argument with respect to the combination of Park, Kim, and Pugliese,” but rather relies on the same arguments alleged for Ground 1. *See* Reply 25.

Petitioner has the better position. Pugliese teaches receiving instructions from a customer to remotely inspect goods as recited in claim 8. Ex. 1010, claim 1, ¶¶ 8, 167; *see also* Ex. 1003 ¶¶ 227–228 (citing additional disclosures in Pugliese). It would have been obvious to combine this teaching with Park’s system in order to allow the customer to choose whether and what products to inspect because doing so would enhance interactivity and could save time in the event the customer only wanted to inspect certain products in their order. Ex. 1003 ¶¶ 221–222.

Kim also teaches the “receiving” step of claim 8. Kim teaches that the placing of an order over the Internet “prompts the delivery service provider to capture an image or video of the ordered product.” Ex. 1006, 3. As such, Kim’s customer order constitutes “instructions from the first customer to

remotely inspect the first set of one or more goods utilizing the image capture device” that are received on the agent’s communication device as recited in claim 8. Ex. 1003 ¶ 226. Thus, even without the teachings in Pugliese, Petitioner has sufficiently demonstrated that claim 8 would have been obvious over Park and Kim.

Finally, Patent Owner’s argument that “Park’s warehouse-based delivery model” does not allow for receiving instructions to remotely inspect a product is unavailing. As explained above, we credit Petitioner’s showing that it would have been obvious to modify Park to allow the delivery agent to use the camera on their MDAS to obtain an image of the product, transmit it to the customer, and receive instructions from the customer. *Supra* § III.E.i. That doing so may add time to the delivery or require the agent to remove the product from a delivery bag does not overcome that showing. *Id.* Moreover, the additional combination of Pugliese’s teachings allowing the customer to specify an inspection option (e.g., whether to inspect on a product-by-product basis) would have been an obvious and beneficial extension of the Park-Kim combination. *See* Ex. 1003 ¶¶ 221–222. Accordingly, Petitioner has shown that the articulated combination of references teaches or suggests all of the limitations of claim 8.

ii. Claims 22 and 23

Claim 22 depends from claim 1 and recites the additional steps of “receiving a rejection of an item to be acquired in the first set of one or more goods from the first customer” and “causing the delivery agent system to look for a similar item based on the receipt of the rejection.” Ex. 1001, 12:3–7. Claim 23 depends from claim 22 and further recites “wherein the delivery agent system travels to a second shopping location to look for the similar

item.” *Id.* at 12:8–10. For these limitations, Petitioner relies on teachings in Park and Kim as well as Pugliese’s teachings of a shopper rejecting a product and being offered alternatives by the sales agent. Pet. 70–72 (citing Ex. 1003 ¶¶ 230–238; Ex. 1005, 4:7–16, 22:21–23:10; Ex. 1006, 1, 3; Ex. 1010 ¶¶ 10, 237).

Patent Owner separately disputes Petitioner’s showing for claims 22 and 23. Resp. 56–57. According to Patent Owner, “Petitioner fails to show the specific Park-Kim combination would even work for cancellations and replacements.” *Id.* at 56 (citing Ex. 2016 ¶¶ 118–120). Patent Owner argues “there is no teaching in Kim that the customer has any opportunity to reject anything” and “Pugliese does not cure Kim because Pugliese does not teach a rejection nor an agent shopping for other goods on the customer’s behalf.” *Id.* at 57. For claim 23, Patent Owner additionally contends “[b]ecause there is no teaching of a delivery agent receiving a rejection which causes the delivery agent system to look for a similar item in the combination of Park-Kim-Pugliese, there is also no teaching of the delivery agent system travelling to a second location to look for a similar item to be acquired by the agent.” *Id.* (citing Ex. 2016 ¶ 121).

In reply, Petitioner contends Patent Owner “improperly focuses only on the Park-Kim combination.” Reply 25. According to Petitioner, Pugliese explicitly teaches that the customer may reject a product and Patent Owner fails to address Petitioner’s showing that it would have been desirable to incorporate Pugliese’s offering of alternative products to increase the likelihood that a customer ordered from the provider. *Id.* at 26.

Patent Owner sur-replies, urging that Pugliese’s teachings “do not reconcile with the infeasibility of” shopping for a replacement product or

offering an alternative “in the Park-Kim combination” and that Petitioner has not shown that the combination “teaches the agent traveling to a second location to shop for that similar product, as in Claim 23.” Sur-reply 24–25.

Petitioner again has the better position. As an initial matter, we agree with Petitioner that Kim’s teaching that the customer sends a message to the delivery service provider to “confirm the product” (*see* Ex. 1006, 3; Ex. 1038, Fig. 2 (S19)), reasonably suggests the customer may also reject the product if, e.g., the image they receive from the delivery service provider reveals the product is not to their satisfaction. *See* Pet. 71; Ex. 1003 ¶ 230 (“A POSITA would have recognized that the logical converse of receiving such a confirmation (i.e., an acceptance) of the product would be to receive a rejection of the product, and thus, Kim renders obvious ‘*receiving a rejection of an item to be acquired in the first set of one or more goods from the first customer*’.”).¹³ Patent Owner’s argument that Kim does not expressly teach “that the customer has any opportunity to reject anything” (Resp. 57) is unavailing because it does not account for the reasonable inferences a POSITA, i.e., a person of “ordinary creativity, not an automaton,” would draw from Kim’s disclosure. *See KSR*, 550 U.S. at 421.

In addition, Pugliese teaches an online shopping system that allows the customer to reject items shown to them and “offers suggestions and alternatives” in their place. Ex. 1010 ¶¶ 10, 237; *see also* Ex. 1003 ¶¶ 231, 233. We also credit Dr. Houh’s testimony that

[t]o fulfill the customer’s order, and to ensure customer satisfaction, it would have been obvious (given the teachings of Pugliese) that [when an item is rejected] the delivery agent

¹³ Dr. Mitzenmacher recognizes this argument from Petitioner and does not specifically dispute it. *See* Ex. 2016 ¶ 119 (focusing on other elements).

subsequently looks for an alternative product to fulfill the customer's order, as such a scenario would mirror what the customer would otherwise do when shopping himself or herself (e.g., outside the context of remote shopping, when the customer is shown an item of clothing by an employee of the store, does not like the style, the customer is subsequently shown different items in response to the customer's feedback).

Ex. 1003 ¶ 234. Thus, Petitioner has shown that Pugliese teaches or suggests the additional steps recited in claim 22. *Id.* ¶¶ 231, 233.

Petitioner has also articulated sufficient reasoning with factual underpinning for combining these teachings from Pugliese with Park and Kim. *See* Pet. 67; Ex. 1003 ¶¶ 218–221 (Dr. Houh's testimony that the combination would be "beneficial . . . to ensure that the customer received goods identical to that which was ordered" and increase the likelihood of a completed order "even in the case of a good being rejected, instead of [the customer] abandoning the shopping event entirely").

Patent Owner's arguments regarding the alleged "infeasibility" of shopping for replacement products or offering alternatives in the Park-Kim combination are unavailing. Sur-reply 24–25; *see also* Resp. 56 (urging that "Petitioner fails to show how the specific Park-Kim combination would even work for cancellations and replacements"). First, these arguments are premised on Patent Owner's overly restrictive interpretation of Park and Kim as well as Patent Owner's failure to account for the ordinary creativity of a POSITA, which we have already addressed above. *Supra* § III.E.i.

Second, Petitioner has provided a sufficient explanation of how its proposed combination would work with Park's distribution centers. In particular, Petitioner points to Park's teaching of "overlapping" distribution centers such that "when a primary product distribution center normally

associated with that customer does not currently have in stock a product the alternative product distribution center can be used to service a customer.” Pet. 72 (quoting Ex. 1005, 4:7–16, 22:21–23:10) (internal quotations and emphasis removed). We credit Dr. Houh’s testimony that “given Pugliese’s teachings of suggestions and alternatives . . . a POSITA would have recognized that . . . the primary product distribution center may not have an alternative in stock, and thus, the delivery agent may need to travel to the alternative distribution center to service the customer.” Ex. 1003 ¶ 237.

Finally, we disagree with Patent Owner’s argument that Petitioner has not shown that the combination teaches an agent traveling to a second shopping location as recited in claim 23. Resp. 57; Sur-reply 25. Park’s “alternative distribution center” is a second shopping location. *See* Ex. 1003 ¶¶ 237–238; Ex. 1005, 4:7–16. And in the articulated combination of Park, Kim, and Pugliese, the delivery agent travels there to look for an item similar to the one rejected by the customer. *See* Ex. 1003 ¶ 237 (explaining this is analogous to a customer having to travel to a second store when the item they want is out of stock at a first store). Accordingly, Petitioner has shown that the articulated combination of references teaches or suggests all of the limitations of claims 22 and 23.

IV. CONCLUSION¹⁴

Petitioner has shown, by a preponderance of the evidence, that claims 1–5, 8, 9, 12, 14, 18, 19, and 21–28 of the ’067 patent are unpatentable.

¹⁴ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this Decision, we draw Patent Owner’s attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or*

Claims	35 U.S.C. §	Reference(s)/ Basis	Claims Shown Unpatentable	Claims Not shown Unpatentable
1, 2, 5, 12, 14, 18, 19, 25, 26, 27, 28	103(a)	Park, Kim	1, 2, 5, 12, 14, 18, 19, 25, 26, 27, 28	
3, 4, 9, 24	103(a)	Park, Kim, Hileman	3, 4, 9, 24	
21	103(a)	Park, Kim, Mault	21	
8, 22, 23	103(a)	Park, Kim, Pugliese	8, 22, 23	
Overall Outcome			1–5, 8, 9, 12, 14, 18, 19, 21–28	

V. ORDER

Accordingly, it is:

ORDERED that Petitioner has shown that claims 1–5, 8, 9, 12, 14, 18, 19, and 21–28 of U.S. Patent 10,115,067 B2 are unpatentable; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to this proceeding seeking judicial review of our Decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

Reexamination During a Pending AIA Trial Proceeding. See 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. See 37 C.F.R. §§ 42.8(a)(3), 42.8(b)(2).

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Patent 10,115,067 B2

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