

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

**HOME DEPOT USA, INC. and
HOME DEPOT SOLUTIONS LLC,**
Petitioner,

v.

INNOVAPORT, LLC,
Patent Owner.

Inter Partes Review No.: IPR2024-00096
Patent No. 8,775,260 B2

**PETITION FOR INTER PARTES REVIEW OF U.S. PATENT NO.
8,775,260 UNDER 35 U.S.C. §§ 311-319 AND 37 C.F.R. §§ 42.1-100, ET SEQ**

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260 PATENT LIST OF CHALLENGED CLAIMS

Claim	Limitation
1pre	A method of providing product location information within a store, the method comprising:
1a	affixing at least a first input device at a first location within the store, so that the first input device is substantially stationary;
1b	providing an inventory information unit having a database containing product location information and additional product-related information including product availability information;
1c	obtaining a product location inquiry at the first input device, wherein the first input device includes a receiver, and the product location inquiry is a voice signal received by the receiver;
1d	processing the product location inquiry at a signal processing device to determine a product location inquiry signal;
1e	querying a database to obtain product location information in response to the product location inquiry signal;
1f	providing an information signal in response to the product location inquiry signal, the information signal at least sometimes including at least a first portion of the product location information and also depending at least sometimes upon a first portion of the product availability information; and
1g	providing an output signal at an output device, the output signal being a response to the product location inquiry, and being based upon the information signal,
1h	whereby, when the product availability information indicates that a product is unavailable at a location, the information signal is configured so that the output signal does not provide an indication that the product is available at the location.
2	The method of claim 1, wherein the additional product-related information includes product promotion information.
3pre	The method of claim 1, further comprising:
3a	determining an availability within the store of a product to which the product location inquiry pertains.

4	The method of claim 1, wherein the first input device includes a user interface with a keyboard entry device.
6pre	The method of claim 1, further comprising:
6a	updating at least some of the product location information to reflect changes in inventory occurring within the store;
6b	recording information relating to the inquiry and analyzing the information relating to the inquiry; and
6c	comparing information regarding the product location inquiry with additional information concerning products sold at the store.
7pre	A method of providing product location information within a store, the method comprising:
7a	affixing at least a first input device at a first location within the store, so that the first input device is substantially stationary;
7b	providing a database containing product location information and additional product-related information including product availability information;
7c	obtaining an inquiry at the first input device;
7d	processing the inquiry at a processing device to determine an inquiry signal;
7e	querying a database to obtain product location information in response to the inquiry signal;
7f	providing an information signal in response to the inquiry signal, the information signal at least sometimes including at least a first portion of the product location information and also depending at least sometimes upon a first portion of the product availability information;
7g	providing an output signal at an output device, the output signal being a response to the inquiry and being based upon the information signal,
7h	whereby, when the product availability information indicates that the product is unavailable at a location, the information signal is configured so that the output signal does not provide an indication that the product is available at the location; and
7i	comparing information regarding the inquiry with additional, information concerning products sold at the store.

9pre	A method of providing product location information regarding locations of products within a store to customers within the store, the method comprising:
9a	affixing a plurality of user interfaces respectively at respective positions within the store in a substantially stationary manner;
9b	receiving input signals representative of inquiries from the customers in the store at the user interfaces, wherein each of the user interfaces includes a memory unit;
9c	conducting periodic communications between the user interfaces and a hub that is at least indirectly in communication with each of the user interfaces and that is capable of accessing at least one database;
9d	querying the at least one database to obtain product location information and additional product-related information;
9e	providing portions of the product location information from the hub to the respective memory units of each of the user interfaces; and
9f	providing output signals to the customers in the store via the user interfaces, the output signals being responses to the inquiries represented by the input signals, the responses being based upon the portions of the product location information.
11pre	The method of claim 9, further comprising:
11a	determining an availability within the store of a first of the products to which a first of the product location inquiries pertains.
15pre	A method of providing product location information within a first store, the method comprising:
15a	providing a hub that is at least indirectly in communication with each of a plurality of user interfaces, and that is capable of accessing at least one database, the at least one database including both product location information and additional product-related information,
15b	wherein the additional product-related information includes: information concerning a quantity of a first product within the store; information concerning a price of the product; information concerning an availability or unavailability of the product within the store; and information linking the product with another product in a cross-referential manner;

15c	periodically engaging in the communication with each of the user interfaces, wherein the engaging in the communication includes:
15d	receiving inquiry signals from the user interfaces;
15e	querying the database to obtain portions of the product location information in response to the inquiry signals; and
15f	providing information signals in response to the inquiry signals for receipt by the user interfaces, wherein the information signals include portions of both the product location information and the additional product-related information, whereby the user interfaces are able to provide output signals based upon the information signals;
15g	wherein at least some of the communication is wireless communication.
16	The method of claim 15, wherein at least one of the user interfaces is provided by a mobile device.
17	The method of claim 16, wherein at least one of the user interfaces is substantially stationary, and wherein the at least one of the user interfaces provided by the mobile device is utilized by a customer within the store.

Home Depot USA, Inc. and Home Depot Solutions LLC (“Petitioner”)

request Inter Partes Review (“IPR”) under 35 U.S.C. §§ 311–319 and 37 C.F.R.

§ 42 of claims 1-4, 6, 7, 9, 11 and 15-17 (“the Challenged Claims”) of U.S. Patent No. 8,775,260 (“the 260 patent”) assigned to Innovaport LLC (“PO”).

I. INTRODUCTION

The 260 patent should not have issued. The 260 patent is generally directed toward old technology—providing a customer with the location and/or availability of a product in a store in response to a voice inquiry. The challenges in this Petition are based on prior art that discloses this technology and show that the challenged claims of the 260 patent are all unpatentable.

II. STATEMENT OF PRECISE RELIEF REQUESTED

In accordance with 35 U.S.C. § 311, Petitioner requests cancelation of the Challenged Claims of the 260 patent in view of the following grounds:

Ground	Claims	Stat. Basis	Prior Art
1	1-4, 6, 7, 9, 11, 15-17	§103	Shanman
2	15-16	§103	Ogasawara and Beach

III. THE 260 PATENT

A. Overview of the 260 Patent

The 260 patent is entitled “Apparatus and Method For Providing Product Location Information To Customers In A Store,” and claims priority to an October 9, 1999 provisional. EX1001, [54], [60]. The 260 relates to providing product

location and other information to customers using a server and a client. EX1001,

Abstract.

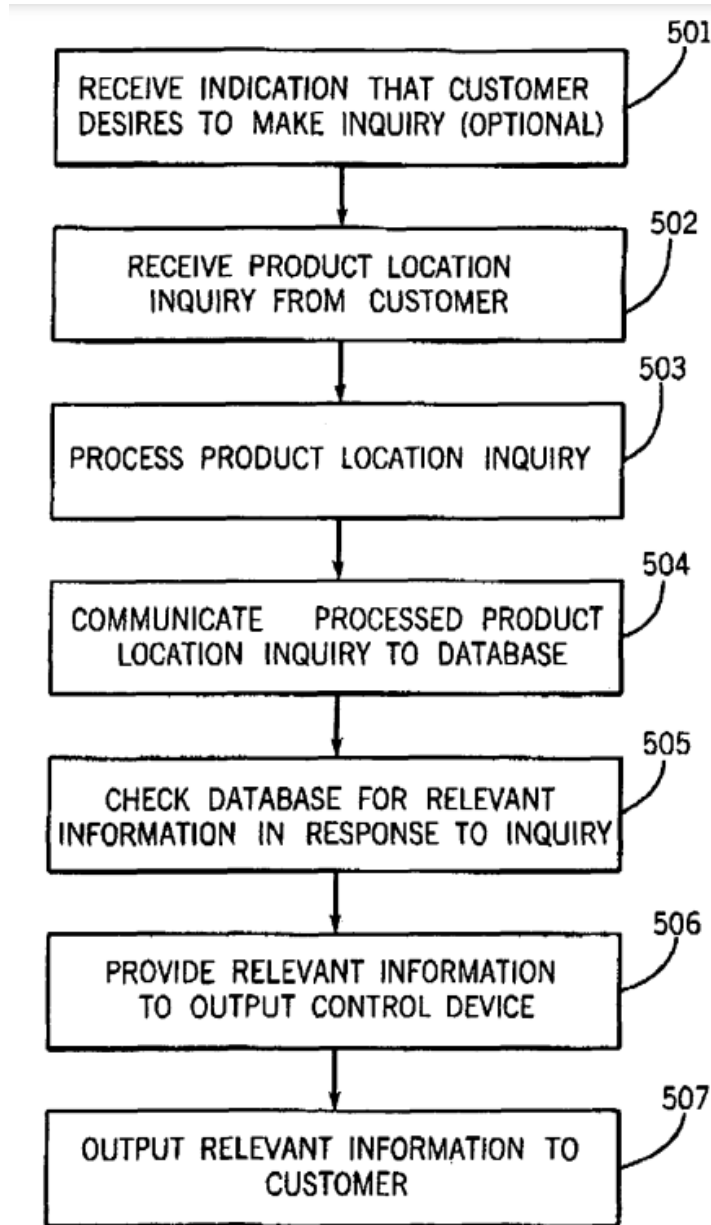


FIG. 5

EX1001, FIG. 5. EX1002, ¶42.

B. Overview of the 260 Patent’s File History

The Examiner rejected claims 1-3, *inter alia*, over Gupta. EX1003, 74. In its response, PO amended the claims and argued that the invention is not limited to a specific system and “can, but need not, involve complicated wireless technologies such as “RF link” or “infrared (IR) transmission.” *Id.* at 82. By so doing, the applicant made clear that the claims should be broadly construed to include wireless communications between the input device used by the customer and the inventory information unit with the database. EX1002, ¶43.

C. Person of Ordinary Skill in the Art

A person of ordinary skill in the art (“POSITA”) at the time of the alleged invention of the 260 patent (October 9, 1999) would have had a bachelor’s degree in computer science or information systems, such as software engineering or a similar course of study and at least 2 years of practical experience working in interactive multimedia information retrieval systems or equivalent qualifications through some combination of education, training, and experience. Additional education/experience in a relevant field may compensate for a deficit in one of the other aspects of the requirements. EX1002, ¶44.

D. Claim Construction Under 37 C.F.R. § 42.104(b)(3)

The Challenged Claims are interpreted using the same claim construction standard that is used to construe the claim in a civil action in federal district court. 37 C.F.R. § 42.100(b).

Petitioner does not contend that its proposed constructions are complete constructions of these limitations or the claims for any other purpose, including for issues that have been raised in the related litigation. Because the prior art asserted herein discloses the preferred embodiment within the indisputable scope of the claims, the Board need not construe the outer bounds of the claims as part of these proceedings. The district court may have to address other bounds of the claims in addressing infringement. *See, e.g., Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (citing *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)) (providing that only those terms that are in controversy need be construed, and only to the extent necessary to resolve the controversy). EX1002, ¶45-46.

Any claim term not listed below should be construed according to its plain and ordinary meaning to a POSITA at the time of the 260 patent. EX1002, ¶47.

1. “product location inquiry” (claim 1)

This term should be construed according to its plain and ordinary meaning—that is, “an inquiry that results in a response including a product location.” EX1002, ¶48.

In the Target litigation, PO filed a motion for summary judgment asserting that the construction of this term should be a “keyword search.” EX1019, 58. Though not an express claim construction, PO argued there that a product location

inquiry cannot be a preprogrammed list, but instead must be a real-time inquiry.

Id., 58-59. EX1002, ¶49.

The intrinsic evidence does not support PO's inclusion of keywords¹ or real-time in the construction. Keywords do not appear as a requirement for a product location inquiry in the specification or the prosecution history. And, though the prosecution history of the later-filed '690 patent does include discussion by PO regarding real-time responses to inquiries (EX1028, 92-93), there is nothing in the plain language of this limitation that supports requiring inquiries or responses in real-time. Moreover, the statements during prosecution do not rise to the level required for prosecution history disclaimer because the discussion of real time in the prosecution history is not clear and unambiguous. Absent a disclaimer, there is no way to interpret the "product location inquiry" limitation, whether considering the words individually or as a whole, as including a real-time requirement. Even PO's proposed construction of "keyword search" does not include a real-time requirement. Moreover, there is nothing about "keyword search" that limits the time at which the keywords are picked or entered into the system. EX1002, ¶50.

Regardless, the below grounds show that the claims are invalid under either construction. EX1002, ¶51.

¹ It is also not clear what is meant by "keywords" in PO's construction.

2. **“linking the product with another product in a cross-referential manner”** (claim 15)

This term should be construed according to its plain and ordinary meaning, which is “data linking a product to a different product.” In the Target litigation, PO filed a motion for summary judgment asserting that the construction of this term should be “data linking a product to a different *type* of product.” EX1019, 18-19 (emphasis added). EX1002, ¶52.

The intrinsic evidence does not support PO’s inclusion of “type” in the construction. The specification includes an example that “the system, in response to an inquiry regarding the location of product Y, can respond by stating ‘Product Y is located in aisle 3. Product Z, which is on sale, is also located in aisle 3.’” EX1001, 15:36-42. During prosecution of a later patent, U.S. Patent No. 9,489,690, that claims priority to the 260 patent, the Applicant distinguished Berstis stating:

rather than concerning operation in which at least one suggestion is provided regarding another product in response to the receipt of a product location inquiry concerning a specific product from a customer within a store, Berstis instead appears to concern providing product location information in regard to products that ‘match’ products that were previously-determined to be of interest

EX1028, 94. The Applicant stated that “the Applicant has not been able to find within Berstis any disclosure or suggestion of providing at least one suggestion regarding any product differing from a product that was previously-determined as

being of interest.” *Id.* As shown by the intrinsic evidence, there is no support for limiting this term to require a different type of product. Instead, the plain language and intrinsic evidence support a claim construction that requires “data linking a product to a different product.” EX1002, ¶53.

Regardless, the below grounds show that the claims are invalid under either construction. EX1002, ¶54.

E. Non-Functional Descriptive Material

The Challenged Claims recite many instances of non-functional descriptive material that is not entitled to patentable weight. An example of this is the recitation in claim 2, which recites “wherein the additional product-related information includes product promotion information.” This recitation is directed toward printed matter because it only claims the content of the information (the “product promotion information”). MPEP §2111.05. The recitation of printed matter is not entitled to any patentable weight because it bears no functional relationship to the substrate/product on which it appears, *i.e.*, the memory and/or computer display. The display and/or memory merely serves as support for the printed matter, and the recited information is independent of the computer display and/or memory. MPEP §2111.05(I)(B); *see also Ex parte Nehls*, Appeal No. 2007-1823, at 14 (BPAI January 28, 2008) (precedential) (sequence ID was non-functional descriptive material because it was not functionally related to computer

system). Accordingly, this recitation is not entitled to any patentable weight.

Additional recitations in the challenged claims not entitled to patentable weight for the same or similar reasons are identified below. EX1002, ¶55.

IV. OVERVIEW OF THE PRIOR ART REFERENCES

A. EX1004 – Shanman

U.S. Patent No. 7,231,357 to Shanman et al. (“Shanman”) is entitled “System and method for the targeted distribution of discount coupons over a network.” EX1004, [10], [54], [76]. Shanman was filed on April 19, 1999, and issued on June 12, 2007. EX1004, [22], [45]. Shanman is prior art under at least 35 U.S.C. §§ 102(e). Shanman does not appear in the file history of the Challenged Patent and thus was not considered by the patent examiner during prosecution. EX1003. EX1002, ¶56.

Shanman relates to a customer selecting items or entering its shopping list items into a mobile device which are transmitted to a server, and in response, the mobile device receives a file from the server containing the locations and promotional information for those items, and targeted promotional information either concerning related products or other items based on customer preferences or history. EX1004, Abstract, FIG. 3, FIG. 5, 6:5-7:65, 8:11-22. EX1002, ¶57.

The Shanman mobile device is called a “client” and “consumer data processing unit,” which is “implement[ed] on any type of handheld devices,

wristwatch-type computing devices, cellular or satellite communication devices, computers, televisions, telephones, and the like.” EX1004, 6:5-8, 24:17-21. The server, called the coupon server, receives the request from—and responds to—the mobile device over a network. EX1004, 6:13-28 (“coupon server is located remotely from the consumer data processing units” and is “responsive to a connection with the consumer data processing unit.”). The disclosed network includes the internet through cellular and wireless local area networks. EX1004, 11:53-58 (“the present invention applies to any type of network, including local and wide area networks, private networks, on-line subscription services, on-line database services, public networks including the internet and the World Wide Web, television networks, satellite networks, and wireless networks”). EX1002, ¶58.

In Shanman, the user makes inquiries via a user interface on the mobile device. EX1004, 8:63-65 (“The consumer may select particular goods by means of predetermined keyboard entries, mouse clicks, voice commands, or the like, made by use of the user input device”). The server processes the requests and has a memory containing the requested information including the location of the products. EX1004, Abstract (“the coupon server transmits a file . . . identifying the aisle location in the selected retail outlet of the goods selected by the consumer”). The server responds to the mobile device with this information so the mobile device can display this location information on the same monitor that the user

made the selection. EX1004, 16:9-12 (“the selected goods are submitted to the coupon server by clicking on a ‘submit’ button displayed on the display monitor of the client computer”), FIG. 5.

<u>SHOPPING LIST FOR YOUR SELECTED SUPERMARKET</u>	
	<u>Aisle No.</u>
Flour	4
Yeast	4
Cake Mix	4
Baking Accessories	4
Bottled Tea	5
Bottled Water	5
Soda	5
Bread Crumbs	6
Hamburger Rolls	6
White Bread	6
Bar Soap	3
Body Cream	3
Conditioner	3
Mouthwash	3
Razors	3
Shampoo	3
Apples	2
Bananas	2
Broccoli	1
Cabbage	1
Carrots	1
Cauliflower	1
Chicken	9
Cold Cuts	9
Hot Dogs	9
Lamb Chops	9

FIGURE 5

EX1002, ¶59.

Shanman’s server also responds with targeted advertising and promotional material. EX1004, 4:45-53. This targeted material is based on user preferences and history. EX1004, 5:20-59 (“information concerning consumers’ purchasing habits, interests, preferred brands, and other data . . . enables targeted distribution of . . . promotional information and purchase incentives”), 7:47-65, 10:15-46. This additional information can also concern competing goods related to the selections. EX1004, 7:47-65 (“competitive pricing or availability information may also be

provided”), 17:35-49, 22:3-8. This promotional information is displayed on the user interface along with the requested information. EX1004, 16:18-22 (“goods which are selected by the user are also highlighted to distinguish from non-selected goods”). EX1002, ¶60.

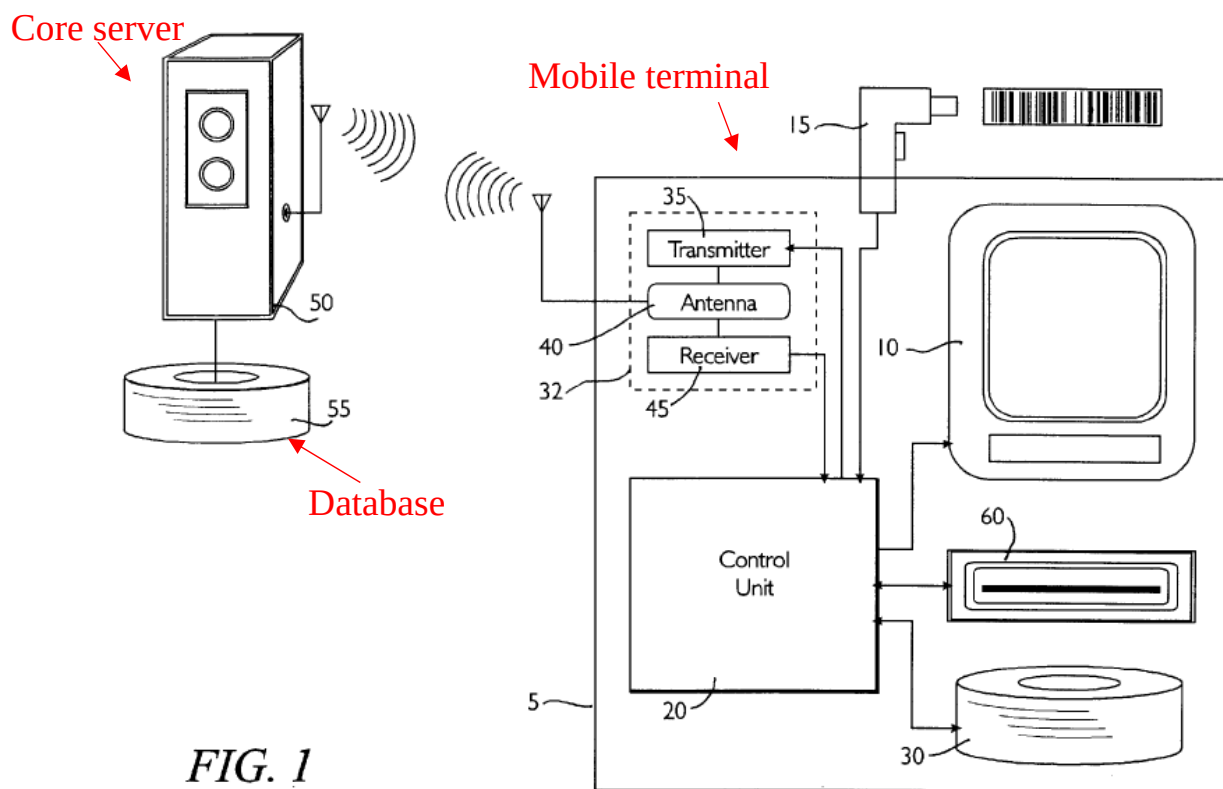
B. EX1005 - Ogasawara

U.S. Patent No. 6,123,259 to Ogasawara (“Ogasawara”) is entitled “Electronic shopping system including customer relocation recognition.” EX1005, [54]. [75]. Ogasawara was filed April 30, 1998, and issued on September 26, 2000. EX1005, [22], [45]. It is prior art under at least 35 U.S.C. §§ 102(a), 102(b), and 102(e). Ogasawara does not appear in the file history of the Asserted Patents and thus was not considered by the patent examiner during prosecution. EX1003. EX1002, ¶61.

Ogasawara relates “generally to an electronic information display and customer location recognition,” in particular “to a computer based system for locating a customer’s position within a shopping store and displaying product and location information on a customer operated mobile terminal.” EX1005, 1:6-11. Ogasawara’s mobile terminal includes a user interface. EX1005, 4:61-67 (“Pressure sensitive (touch screen) technology may be incorporated into the display 10 so that a shopper may access the mobile terminal 5 by merely touching certain portions of the screen.”), (“a numeric or alpha-numeric button or keypad arrangement may be

provided in combinations with the display 10”), 10:13-24, 14:66-15:28.

Ogasawara’s mobile terminal 5 may be either hand-held or mounted on a shopping cart, includes a built-in barcode scanner, and is configured to communicate with a store central computer 50 by means of an individually addressable RF communication transceiver. EX1005, 2:32-34.



EX1005, Fig. 1 (annotations added). EX1002, ¶62.

The store central computer includes “[a] merchandise item database, comprising at least a Price Look Up Table is organized into the store central computer’s memory and is configured to include identification indicia for each

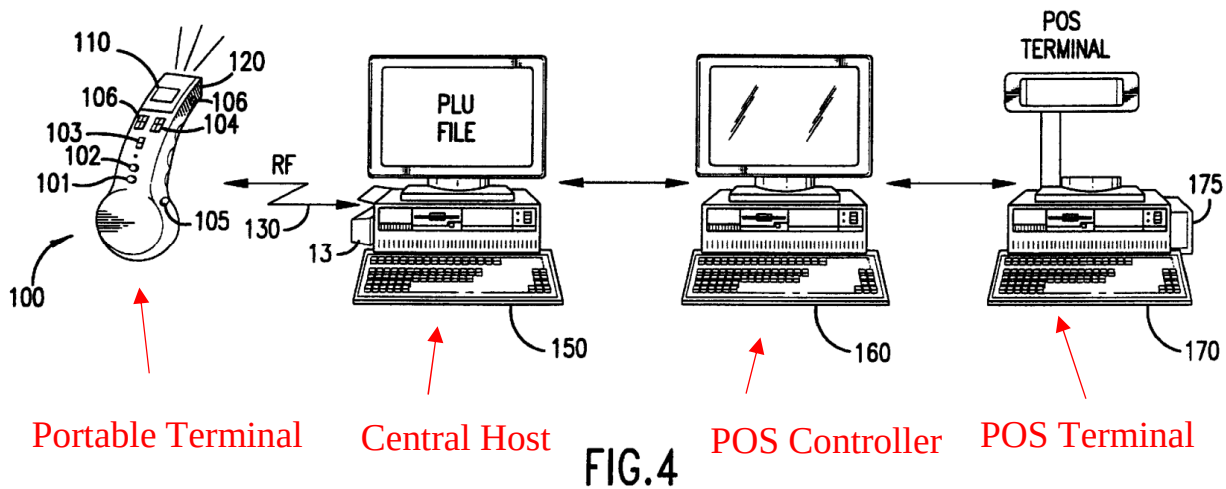
item of merchandise, such as brand name, generic name, price and the like and also includes location information for each item of store merchandise.” EX1005, 2:41-45. “As a customer scans the bar code of a particular item, the store central computer accesses that item’s location information and assigns that particular location to be the customer’s current location.” EX1005, 2:46-50. The system processes the contents of the customer’s shopping list and chooses the closest item to the customer’s current location as the desired destination item. The direction and distance information, such as aisle and shelf number, is then displayed on the mobile terminal’s display panel. EX1005, 2:55-60. Customers are allowed to “move[] through a store in a more efficient manner” because they “no longer need to search through the entire store to find a particular item of merchandise, but are instead directed to each next desired merchandise item along the shortest shopping path.” EX1005, 1:52-55. Ogasawara also provides “[r]eplenishment items [and] recommended promotional items” “for a next desired destination item based on the customer’s current location” on the customer’s recommended routing. EX1005, 3:56-58. EX1002, ¶63.

C. EX1006 – Beach

U.S. Patent No. 6,084,528 to Beach et al. (“Beach”) is entitled “Intranet scanning terminal system” and July 4, 2000. EX1006, [54], [45]. It is prior art under at least 35 U.S.C. §§ 102(a), 102(b), and 102(e). Beach does not appear in

the file history of the Challenged Patent and thus was not considered by the patent examiner during prosecution. EX1003. EX1002, ¶164.

Beach relates “generally to an improved portable data terminal,” in particular “to a system for communicating information over wireless communication network using the portable terminal.” EX1006, 1:12-15. In Beach, “the portable terminal 100 communicates over a wireless communication network 130 . . . a controller 150 which functions as the central host to the portable terminal 100.” EX1006, 6:36-40.



EX1006, Fig. 4 (annotations added). “[T]he central host is provided with a database of available electronic coupons.” EX1006, 13:15-16. “Upon Scanning of the code on a selected merchandise item 260, a display 244 on the bar code reader 240 displays product information such as price, product name, quantity and nutritional information.” EX1006, at 8:5-9. “The customer selection of items is made through a graphical use interface which simulates a store layout, i.e., aisles

with items in them as they are stacked within the store.” EX1006, 15:4-7. After a consumer has selected several items for purchase, the portable terminal downloads information from the central controller and displays it; thus, providing the consumer confirmation that items have been scanned for purchase. EX1006, 11:12-19. In Beach, the graphical user interface “simulates a store layout, i.e., aisles with items in them as they are stacked within the store.” EX1006, 15:5-9. “This permits the user to find items they know are located in certain aisles of the store.” EX1006, 15:5-9. Additionally, Beach discloses “portable terminals could be used to provide information pertaining to recommended accessories which would match a selected item by providing cost, location.” EX1006, 16:52-55. EX1002, ¶65.

V. GROUND 1: SHANMAN RENDERS OBVIOUS CLAIMS 1-4, 6, 7, 9, 11 AND 15-17

A. Claim 1

As shown below, Shanman in view of the knowledge of a POSITA renders claim 1 obvious. EX1002, ¶67.

1. [1pre]

The preamble is disclosed or rendered obvious by Shanman. To the extent that “within a store” means that the product location information must specify where within a store the product is located, Shanman discloses the preamble. *See, e.g.,* EX1004, Abstract (“In response to the selection of goods, the coupon server transmits to the consumer computer a file . . . identifying the aisle location in the

selected retail outlet of the goods selected by the consumer.”), 5:3-19, 16:23-32.

The aisle location is location information “within a store.” EX1002, ¶68.

To the extent that “within a store” means that the recipient of the location information must be within a store when the product location information is received, a POSITA would have understood, or found it obvious, that Shanman discloses a server and client device within the same store. This is because, while Shanman discloses some embodiments in which the server and client device are geographically separated, Shanman also discloses other embodiments in which the server and the client device communicate with each other via a local area network (“LAN”). EX1004, Abstract, 7:37-65, 8:11-42, 11:35-65 (“the present invention applies to any type of network, including local . . . area networks”). A POSITA would have understood a LAN to pertain to a network of devices located in close geographical proximity to each other such as in a same building and, because it is unlikely that the server would be located in a customer’s home, a POSITA would have found it obvious to locate the LAN including the server 10 and client 12 in a store (e.g., a grocery store). EX1002, ¶69.

2. [1a]

Shanman discloses this limitation. Shanman discloses providing a client 12. EX1004, 6:5-57, 12:24-40, 13:4-14:21, 14:26-31, 24:17-21, Figs. 1, 2. Shanman discloses the client—consumer data processing unit—as both substantially

stationary and as a mobile device. EX1004, 2:42-57, 11:35-58 (“the teachings of the present invention are equally applicable for use in devices such as televisions (e.g., so-called interactive TV), telephones, cellular and satellite communications devices and the like, handheld computers, wristwatch-type computing devices and any other type of data transmission and receiving device capable of achieving connectivity with a server”), 14:26-33, 24:8-21; *see also* 12:24-32 and Fig. 1 (disclosing a personal computer, which a POSITA would have understood to be a stationary device, as a clients/consumer data processing units). A POSITA would have found it obvious that the stationary client device be located in a store on the same LAN as the server as discussed above in [1pre]. A POSITA would have found it obvious to affix a personal computer client device 21 to a location within the store to, e.g., prevent the computer from being accidentally knocked down or stolen. The consumer data processing unit client device 21 includes a keyboard 22, a mouse 23, and a display 24. EX1004, 6:5-57, 8:63-65, 13:4-42, 16:66-17:4, 22:9-12, and Fig. 2. Shanman’s client device 21 is also capable of inputting voice commands. EX1004, 8:63-65 (“The consumer may select particular goods by means of predetermined keyboard entries, mouse clicks, *voice commands*, or the like, made by use of the user input device”) (emphasis added). A POSITA would have understood or found it obvious that Shanman’s input device would include a microphone for inputting voice commands. The claimed “user input device” may

be either the client 12 or the microphone of client 12 (which, by virtue of being a part of and/or connected to the client 12, would also be substantially stationary and affixed to a first location within the store). EX1002, ¶70.

3. [1b]

Shanman discloses this limitation. Shanman discloses providing an inventory information unit (e.g., “server” 10). EX1004, 6:5-57, 11:35-58, 12:24-40, 13:4-14:21, 14:26-31, 24:17-21, Figs. 1, 2. The server 10 has a database (“one or more databases are set up on . . . the coupon server”). EX1004, 6:5-57, 11:35-58, 13:62-14:1, 15:22-31, 19:19-21, Figs. 2, 3. The database contains the physical layout of goods in the selected retail outlet including aisle information (“product location information”). See [1a]; EX1004, Abstract, 7:47-65, 8:11-27, 15:22-31, Fig. 5. The database also contains additional product-related information including product availability information. EX1004, 6:33-54 (“name and inventory of goods”); 13:62-14:1 (“including inventory data”); 6:44-54 (“list of goods actually sold at the selected retail outlet”) , 15:19-24 (“list of the goods offered for sale by that retail outlet”), 25:4-9 (“physical layout and inventory of goods at the selected retail outlet are displayed on the consumer data processing unit”). EX1002, ¶71

4. [1c]

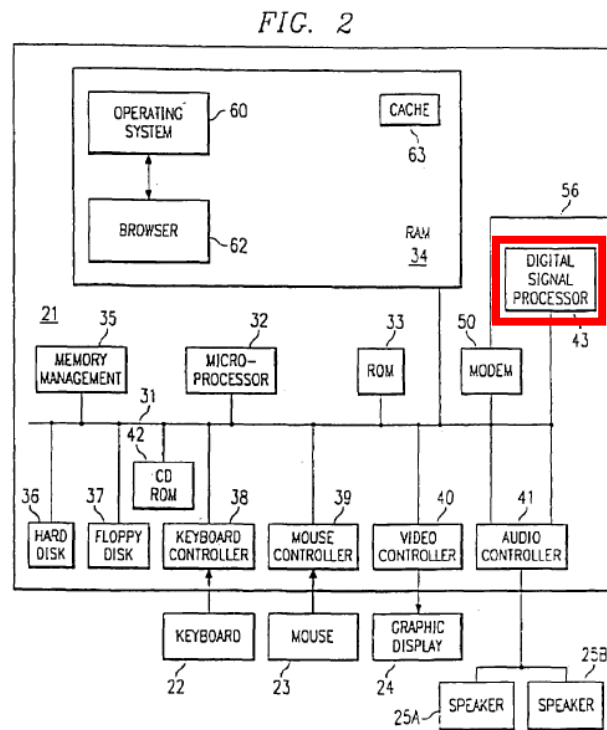
Shanman discloses this limitation. See [1a]. Shanman discloses the “consumer may select particular goods by . . . voice commands . . . made by use of

the user input device.” EX1004, 8:63-65. 22:9-12. A POSITA would have understood or found it obvious that the user input device is or includes a microphone that produces an output signal representative of a user’s voice command (a “voice signal”) that is received by a device in Shanman’s client 12 such as an analog-to-digital (A-D) converter (a “receiver”) to convert the voice signal to a digitized voice signal. This digitized voice signal is a product location inquiry because Shanman’s server 10 responds to it (or to a further-processed version of it) with a product location. EX1004, 5:3-19 (“the location of the selected goods within the selected retail outlet together with discount coupons corresponding to the selected goods”), 7:29-37, 6:5-28, 7:21-29, 8:11-22 (“shopping list may optionally include the actual location of the selected goods, in the selected retail outlet, such as their aisle number in the selected retail outlet”), 15:36-54, 16:5-38, 18:36-47. EX1002, ¶72.

A POSITA would have understood, or found it obvious, that Shanman discloses a system that receives the product location inquiry in real time, while the user is shopping because embodiments in which communications occur on a LAN indicate that the in-store server is located on the same network as the client devices for the reasons discussed in [1pre]. EX1002, ¶73.

5. [1d]

Shanman discloses and, alone or together with the knowledge of a POSITA, renders obvious this limitation. See [1a], [1c]. In Shanman, the client includes a consumer data processing unit (i.e., signal processing device) that processes the consumer's inquiry to create a signal that is sent to the coupon server. EX1004, 6:5-28 ("data processing unit having communication means connectable over a communication medium to at least a coupon server").



EX1004, Fig. 2 (annotation added). EX1002, ¶74.

As discussed above, a POSITA would have understood or found it obvious that the user's voice command signal from a microphone would be input to a receiver such as an A-D converter. A POSITA would have further understood or

found it obvious that the digitized signal from that receiver would be processed using well-known voice recognition techniques in, e.g., the digital signal processor 43 or the microprocessor 32, to determine the content of the user's voice command. EX1002, ¶75 (citing EX1029, 15:46-16:18).

Shanman also provides a second disclosure of this limitation where a signal sent from the consumer data processing unit including the customer's inquiry is processed by the coupon server to determine a product location inquiry signal to be used for accessing the server memory. EX1004, 6:13-28 ("A coupon server . . . comprises . . . a processing unit having communication means . . . to the at least one consumer data processing unit, and being responsive to a connection with a consumer data processing unit), 8:66-9:2 ("the selected information acquired from the consumer data processing unit is transmitted to the coupon server for storage and analysis."), 10:17-28 ("[s]elections of goods made by the consumer are transmitted to the coupon server for use by a server-resident process"). In this regard, a POSITA would have understood and/or have found obvious that the signal received from the consumer data processing unit could not be used directly to retrieve the desired product location information from the database in the server memory and that Shanman's server would need to process the received signal in order to generate the necessary signal for doing so. EX1002, ¶76.

In both scenarios, Shanman discloses that the consumer's product location information inquiry (i.e., the signal output by the microphone resulting from the user's voice command) is processed to determine a signal which is a product location inquiry signal because a product location is returned in response to that signal. EX1004, 8:11-22 ("responsive to the selections of the goods made by the consumer to download to the consumer data processing unit a file containing a list of the selected goods . . . shopping list may optionally include the actual location of the selected goods, in the selected retail outlet, such as their aisle number in the selected retail outlet"), 7:29-37, Abstract ("the coupon server transmits to the consumer computer . . . a file containing data identifying the aisle location in the selected retail outlet of the goods selected by the consumer."). EX1002, ¶77.

6. [1e]

Shanman discloses this limitation. *See* [1d]. In response to a product location inquiry signal resulting from a consumer's inquiry, the server queries the database located in server memory, which responds with product location information. *See* [1c]. The coupon server processes the received signals to query the database to provide the product location information. EX1004, 6:13-28 ("A coupon server . . . comprises . . . a processing unit having communication means . . . to the at least one consumer data processing unit, and being responsive to a connection with a consumer data processing unit), 8:11-22, 16:23-32 ("downloads a customized

shopping list to the consumer data processing unit which may include a list of the selected goods along with their location in the selected retail outlet.”), Abstract, 7:37-65, 8:11-42. A POSITA would have understood that the client’s product location inquiry signal is received at the server as a query of the server’s database to obtain product location information. EX1002, ¶78.

7. [1f]

Shanman discloses and/or renders obvious this limitation. See [1b], [1d], [1e]. In response to the signal generated as a result of the consumer’s inquiry, Shanman’s server transmits the product location to the consumer device. EX1004, Abstract (“the coupon server transmits to the consumer computer . . . a file containing data identifying the aisle location in the selected retail outlet of the goods selected by the consumer.”). The transmission of this product location constitutes “providing an information signal in response to the product location inquiry signal” as recited in this limitation.

The remainder of [1f], including “*sometimes* including at least a first portion of the product location information” and “depending at least *sometimes* upon a first portion of the product availability information,” are akin to conditional limitations (without specified conditions) that are not entitled to patentable weight in a method claim. *Ex parte Schulhauser*, No. 2013-007847 at 10 (P.T.A.B. April 28, 2016) (precedential); see also *Marvell Semiconductor, Inc. v. Uniloc 2017 LLC*,

IPR2019-01350, Paper 24, 37 (PTAB Feb. 1, 2021) (applying *Schulhauser* under *Phillips* construction). In any event, Shanman discloses them.

“the information signal at least sometimes including at least a first portion of the product location information”: A POSITA would have understood that the server’s response to the client includes at least a first portion of the product location information because the communication includes the requested product location (i.e., the product’s location is at least a first portion of the product location information stored in the database). EX1002, ¶79-81.

“the information signal . . . also depending at least sometimes upon a first portion of the product availability information”: If “depending” means rely on, the information signal at least sometimes depends on the product availability information at least because the information signal includes availability information. EX1004, 15:1-16:32 (“the monitor of the consumer data processing unit may display a customized list of goods *available*”) (emphasis added); 7:60-65 (“Competitive pricing or *availability* information may also be provided”) (emphasis added); 8:58-62 (“Based on the selection of a retail outlet . . . the consumer is provided with a customized list of goods *available* in the selected retail outlet”) (emphasis added). If “depending” means controls the outcome of, the information signal also at least sometimes depends on the product availability information because Shanman’s system includes the ability to transmit an

information signal that results in only displaying the goods actually sold at the selected outlet. EX1004, 6:5-57 (“transmit for display on the consumer data processing unit a file containing retail outlet data including the list of goods actually sold at the selected retail outlet”). Further, a POSITA would have understood, or found obvious, that the location is a function of availability—meaning when the product is not available at the selected store, the information signal indicates another location. EX1004, 7:47-65 (“available at a lower cost elsewhere”); 13:50-14:1 (“data for identifying a plurality of participating retail outlets”). EX1002, ¶82.

8. [1g]

Shanman discloses this limitation. See [1b], [1f]. Upon receipt of the response from the server (“information signal”), the client provides an output signal to an output device, namely the display 24 (“outputting in . . . electronic form”). EX1004, 7:29-37, 7:51-60 (“The consumer’s selection of a retail outlet and one or more items of goods from the displayed list of goods results in the downloading to the consumer data processing unit for viewing . . . of a ‘shopping list’ which includes the identity of the selected goods and optionally shows the location in the selected retail outlet of the selected goods, and optionally other information such as store layout, retail price, itemized discount, total discount, estimated discount, and the existence of available coupons.”). This output signal is

based on the information signal because it includes the product location from the information signal. EX1002, ¶83.

9. [1h]

Due to the recitation of “when,” this is a conditional limitation that is not entitled to patentable weight. *See* case citations in [1f]. Even if entitled to patentable weight, Shanman discloses and/or renders obvious this limitation. *See* [1f], [1g]. Shanman’s server 10 contains availability and location information. *See* [1b]. The information signal depends on product availability information. *See* [1f]. Shanman discloses that, when a product is unavailable, its output signal does not provide an indication that the product is available at the location because it only transmits the goods actually sold at the selected outlet. EX1004, 6:5-57 (“transmit for display on the consumer data processing unit a file containing retail outlet data including the list of goods actually sold at the selected retail outlet”). Further, a POSITA would have found obvious to not display the location of unavailable inventory, especially given the data stored on the server in Shanman. EX1002, ¶84.

B. Claim 2.

This claim recites non-functional descriptive material that is not entitled to patentable weight. *See* §III.E. Regardless, Claim 1, from which this claim depends, is obvious over Shanman as shown above. Shanman discloses claim 2’s limitation, so claim 2 is obvious. *See* §V.A, [1b]. The information signal contains further

additional product-related information that includes product promotion information. EX1004, Abstract (“the coupon server transmits to the consumer computer a file containing electronic coupons corresponding to one or more of the selected goods and a file containing data identifying the aisle location in the selected retail outlet”); 16:5-32 (“In response to the consumer’s submission of the selected goods, the server searches its memory for any available coupons pertaining to the selected goods”). EX1002, ¶85.

C. Claim 3.

Claim 1, from which this claim depends, is obvious over Shanman as shown above. Shanman discloses claim 3’s limitation, so claim 3 is obvious. *See* §V.A, [1b], [1f], [1h]. Shanman determines an availability within the store of a product to which the product location inquiry pertains because the information signal responding to the inquiry includes availability information. *Id.* Further, a POSITA would have understood, or found obvious, that because the request was made in real-time from within the store, that the user was making a location and availability information inquiry regarding that particular store (“the store of a product to which the product location inquiry pertains”). *See* [1c], EX1002, ¶86.

D. Claim 4.

Claim 1, from which this claim depends, is obvious over Shanman as shown above. Shanman discloses claim 4’s limitation, so claim 4 is obvious. *See* §V.A,

[1a]. Shanman discloses its first input device (“user input device”) has a keyboard.

EX1004, 8:63-65 (“The consumer may select particular goods by means of predetermined keyboard entries . . . by use of the user input device”). EX1002, ¶87.

E. Claim 6

Claim 1, from which this claim depends, is obvious over Shanman. As shown below, Shanman discloses and renders obvious claim 6’s limitations, so claim 6 is obvious. *See* §V.A; EX1002, ¶88.

1. [6pre]

See §V.A. EX1002, ¶89.

2. [6a]

Shanman discloses this limitation. *See* [1b], [1f]. Shanman discloses that the information on its server, including inventory information, is periodically updated. EX1004, 13:62-14:1 (“The internal memory of the coupon server is adequately large for storing . . . inventory data . . . and physical layout of the goods for sale, which must be periodically updated”); 9:10-19 (“The [shopping list information] is provided by participating retail outlets and is periodically updated to reflect changes in the layout of the respective retail outlet”). A POSITA would have understood or at least found obvious that because the information signal depends on the inventory information, and the server information is periodically updated,

that the product location information reflects changes in inventory occurring within the store. See [1f]. EX1002, ¶90.

3. [6b]

Shanman discloses this limitation. See [1b]; *see also* EX1004, 8:12-15 “(the data processing unit of the coupon server is responsive to the selections of goods made by the consumer to download to the consumer data processing unit a file containing a list of selected goods . . . the shopping list may optionally include the actual location of the selected goods”), 8:66-9:2 (“After monitoring the consumer’s selections, the selected information acquired from the consumer data processing unit is transmitted to the coupon server for **storage** and **analysis**.”) (emphasis added). The consumer’s selections are product location inquiries as discussed above because they result in responses including a product location. EX1002, ¶91.

“recording information relating to the inquiry”:

Shanman discloses recording information relating to the inquiry. EX1004, 22:9-14 (“consumer data processing unit . . . comprises a tracking program for monitoring keyboard events”), *id.* (“monitor the consumer’s selection of . . . goods”). Shanman also discloses recording additional information relating to the inquiry. EX1004, 9:30-36 (“historical profiles”), 19:14-33 (“consumer purchasing habits”), 21:13-22:49 (“user interests,” “previously expressed . . . interest,”

“previous choices,” “previous selections,” “previous interactions”), 19:34-49 (“selected goods”). EX1002, ¶92.

These previous location inquiries are stored on the server. EX1004, Shanman discloses a user’s prior selections are “remembered” and stored with the consumer identifying data to establish a user’s historic profile. EX1004, 22:30-49 (“the selection of goods from the shopping list downloaded from the consumer, in addition to the client profile database, may be part of a Web resource that appears to automatically ‘remember’ the consumer’s previous interactions”), *id.* (“When the consumer later returns to that page, the user ID . . . or the network or client ID . . . is used to automatically highlight or fill in the previous selections”), 17:47-50 (“When a user who has made such choices contacts the same server at a later date, the server assembles information for downloading to the user in accordance with the previously-selected choices”). EX1002, ¶93.

“analyzing the information relating to the inquiry”:

Shanman discloses serving out highly targeted information based on a user’s history. EX1004, 9:30-36 (“information acquired from the consumer data processing unit is preferably stored on the coupon server and used to build historical profiles of individual consumers, to serve out highly targeted purchase incentives and other promotional information based on consumer profiles.”), 10:16-46 (“coupons and other purchase incentives may be served on a targeted

basis depending on individual consumer interests and purchasing habits.”); 5:37-59 (“this information may be used to **analyze** the demand for particular products . . . and, importantly, for the targeted distribution of promotional information to individual consumers”) (emphasis added); 21:13-42 (“**Analysis** of the data on a user-indexed basis would facilitate the determination of individual user interests and purchasing habits”) (emphasis added). A POSITA would have understood that Shanman discloses its server building historical profiles of its users to serve highly targeted purchase incentives discloses analyzing the information relating to the inquiry. EX1002, ¶94.

4. [6c]

Shanman discloses and/or renders obvious this limitation. See [1b], [1c] and [1d]. As discussed above in [1c] and [1d], the product location inquiry is a voice signal output by a microphone that is processed in order to obtain the user’s spoken words. Those spoken words are information related to the product location inquiry. In order to return results, such as names and locations of products sold in the store as discussed in [1e], corresponding to those words spoken by the user, a POSITA would have understood, or found obvious, that those words would be compared with additional information concerning products sold at the store such as the names and inventory of products sold at the store. Said differently, the spoken words(s) (“information regarding the product location inquiry”) would be compared to the

database information (“additional information concerning products sold at the store”) to return relevant results to populate the shopping list. Indeed, Shanman discloses using SQL (structured query language, which is a standard language for relational database management systems), which a POSITA would have understood includes relevance-based searching. EX1004, 20:20. EX1002, ¶95.

Beyond providing relevant search results for the queried product, Shanman also provides targeted information concerning other products sold at the store based on the comparison of the product location inquiry and additional information concerning products sold at the store. *See* §[6b]. Shanman discloses its server storing voluminous information regarding products available at participating retail outlets. EX1004, 13:63-14:1 (“The internal memory of the coupon server is adequately large for storing . . . data for identifying a plurality of participating retail outlets, including inventory data, name, geographic location, and physical layout of goods for sale”). This additional information also includes analysis data based on profiles. *See* [6b]. Products on the server are linked based at least on this additional information. EX1004, 9:30-36, 10:16-28, 10:39-46, 21:13-30 (“brands, type of goods, category of goods”), 10:39-46 (“consumer interests and purchasing habits”), 10:16-28 (“competing brands”), 22:3-8 (“competitive source”), 5:37-59 (“brand preferences”), 7:47-65 (“a different brand of the same type of goods”), 21:35-42 (“another brand”). Shanman then—based on this information—discloses

providing additional promotional information and purchase incentives beyond the inquired-for product. EX1004, 10:15-46 (“purchase incentives in addition to the selected coupons may be targeted based upon a consumer’s . . . historic profile”); *id.* (“other purchase incentives may be served on a targeted basis depending upon individual consumer interests”). A POSITA would have understood, or found obvious, that Shanman’s server enables comparing information regarding the product location inquiry with additional information concerning products sold at the store to provide relevant purchase incentives. EX1002, ¶96.

Shanman’s database can further link products by indexing the additional information. EX1004, 21:13-30 (“indexed by any one of a multitude of identifiers, such as any element of consumer identifying indicia, or any element of selected information, such as preferred retail outlets, preferred brands, type of goods, [and] category of goods.”). This includes linking products by category (i.e., data linking a product to a different product) and location (i.e., data linking a product to a different type of product) within the store. EX1004, 15:19-54, (“Instructional text 104 and targeted advertising text 106 accompany the list of goods”). A POSITA would have understood, or found obvious, that the indexing of products by Shanman’s server (i.e., a POSITA would have understood these to include database relationships) enables comparing information regarding the product location inquiry with additional information concerning products sold at the store.

As an example, Shanman discloses providing coupons for a competing brand in addition to the sought after item. EX1004, 17:35-39 (“consumer may be given the opportunity to receive coupons for a competing brand”). A POSITA would have understood, or found obvious, this example shows that both the Shanman system (compared the sought after product to additional products sold at the store—provided a relevant coupon, and that the user can compare the item it sought against the competing good). EX1002, ¶97.

Therefore, a POSITA would have understood, or found obvious, that to provide cross-promotional coupons to be sent to the user in a response to a product location inquiry, Shanman discloses comparing information regarding the product location inquiry with additional information concerning products sold at the store because the targeted promotional information concerning the other products sold at the store relates (as explained above) to the product location inquiry. *See, e.g.*, EX1004, 10:16-28 (“selections of goods made by the consumer are transmitted to the coupon server . . . [a]dditional promotional information and purchase incentives may also be sent, such as coupons for competing brands of selected goods”), 10:39-56 (“In addition, purchase incentives in addition to selected coupons may be targeted based upon a consumer’s coupon selections”). EX1002, ¶98.

Additionally, a POSITA would have found obvious that the end user can perform this limitation by comparing the promotional information concerning other products with the information concerning the requested product. EX1002, ¶99.

F. Claim 7

As shown below, Shanman in view of the knowledge of a POSITA renders claim 7 obvious. EX1002, ¶100.

1. [7pre]

See [1pre]. EX1002, ¶101.

2. [7a]

See [1a]. EX1002, ¶102.

3. [7b]

See [1b]. EX1002, ¶103.

4. [7c]

See [1c], [9b], §V.D, §V.G.3, EX1002, ¶104.

5. [7d]

See [1d]. EX1002, ¶105.

6. [7e]

See [1e]. EX1002, ¶106.

7. [7f]

See [1f]. EX1002, ¶107.

8. [7g]

See [1g]. EX1002, ¶108.

9. [7h]

See [1h]. EX1002, ¶109.

10. [7i]

See [6c]. EX1002, ¶110.

G. Claim 9

As shown below, Shanman in view of the knowledge of a POSITA renders claim 9 obvious. EX1002, ¶111.

1. [9pre]

See [1pre], §V.A. EX1002, ¶112.

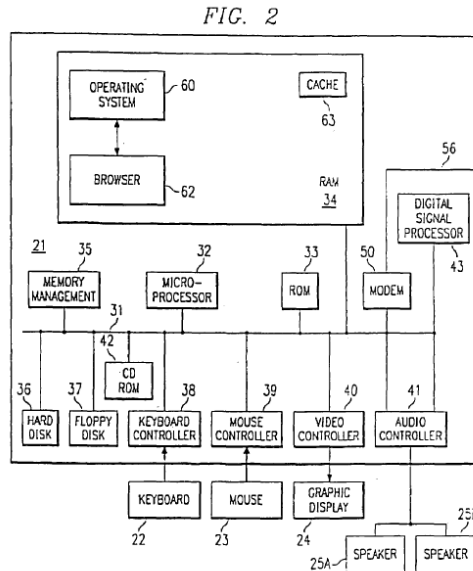
2. [9a]

Shanman discloses or renders obvious this limitation. See [1pre], [1a] (The user input device/consumer data processing unit is the “user interface”). Shanman discloses providing a plurality of user interfaces. EX1004, 6:29-32 (“the consumer data processing **units** comprise client computers”) (emphasis added). A POSITA would have found it obvious to implement Shanman using multiple user interfaces inside the store at different positions, so that customers would be able to conveniently access user interfaces to view the data at different positions in the store. EX1002, ¶113.

3. [9b]

Shanman discloses this limitation. *See* [1c], [1d], [9a]. Shanman discloses the “consumer may select particular goods by means of predetermined keyboard entries, mouse clicks, voice commands, or the like, made by use of the user input device.” EX1004, 8:63-65. 22:9-12. These inquiries at the user interface occur by “a user input device to permit a consumer to make one or more selections from choices displayed on the display monitor.” EX1004, 6:5-13, 5:3-19. Alternatively, a user may enter their shopping list. EX1004, 15:63-66 (“may instead prompt the user to enter their own shopping list”). A POSITA would have understood that the user’s selections or entries on the user interfaces are inquiries. EX1002, ¶114.

Input signals representative of these customer inquiries are generated at the keyboard controller 38 and/or the mouse controller 39. EX1004, 13:25-34 (“The keyboard controller 38 provides the hardware interface for the keyboard 22, the [mouse] controller 39 provides the hardware interface for the mouse (or other hand-operated input implement) 23, the video controller 40 provides the hardware interface for the display 24”), Fig. 2. The keyboard, mouse, and display are collectively the user interface. *See* [1a]; EX1004, 16:5-8 (“input device (in the case of a computer mouse, selection is made by ‘clicking’ on the displayed goods).”).



EX1004, Fig. 2. EX1002, ¶115.

The input signals generated by the keyboard controller 38 and mouse controller 39 are then received by the client at its BIOS within ROM 33. EX1004, 13:9-15 (“the basic input-output system (BIOS) which controls basic hardware operations such as the interaction and the disk drives and the keyboard”), Fig. 2. EX1002, ¶116.

Shanman also discloses that its server (“hub”) receives input signals representative of inquiries because the server responds with the inquired for information. EX1004, Abstract (“In response to the selection of goods, the coupon server transmits to the [client] . . . a file containing data identifying the aisle location int the selected retail outlet”); 5:3-19 (“the location of the selected goods within the selected retail outlet together with discount coupons corresponding to the selected goods”), 7:29-37, 6:5-28, 7:21-29, 8:11-22 (“shopping list may

optionally include the actual location of the selected goods, in the selected retail outlet, such as their aisle number in the selected retail outlet”), 15:36-54, 16:5-38, 18:36-47. A POSITA would have understood that Shanman discloses its server receiving input signals representative of inquiries from the customers in the store at the user interfaces because Shanman discloses its server responding to the inquiries. EX1002, ¶117.

A POSITA would have understood, or found it obvious, that Shanman discloses a system where these inquiries are made in real time, while the user is shopping because, as discussed in [1c] above, Shanman discloses that the server 10 and consumer data processing units/clients 12 (which can be televisions or personal computers and which are substantially stationary and affixed in the store as discussed above in [1a] and [9a]) communicate via a local area network. EX1004, Abstract, 7:37-65, 8:11-42, 11:35-65 (“the present invention applies to any type of network, including local . . . area networks”), 11:46-58 (“the teachings of the present invention are equally applicable for use in devices such as televisions (e.g., so-called interactive TV) . . . and any other type of data transmission and receiving device capable of achieving connectivity with a server”); 12:24-32 and Fig. 1 (disclosing client devices as personal computers). EX1002, ¶118.

The clients 21 include RAM 34, Cache 63, ROM 33, Hard Disk 36, Floppy Disk 37, and CD ROM 42 (each of which is a “memory unit”). EX1004, 13:4-42, 17:4-8, Fig 2. EX1002, ¶119.

4. [9c]

Shanman discloses and/or renders obvious this limitation. *See*, [1b] (the server 10 has a database), [9b] (server (“hub”) and client (contains “user interface”) have communication means), [6a] (“inventory data . . . and physical layout of the goods for sale, which must be periodically updated”). Shanman further discloses an executable program is downloaded to the client. EX1004, 17:8-13 (“the program could be permanently stored on the consumer data processing units.”), 17:17-19 (“The program can be downloaded along with a list of selected retail outlets and goods sold in those outlets”). When using the program, the client communicates with the server whenever a selection is made. EX1004, 17:28-33 (“selection of one or more retail outlets causes the program to communicate with another process to obtain and display a list of selectable goods available in the designated retail outlets.”); *id.* (“Selection of goods by the consumer causes the program to communicate with the server.”). Additionally, because Shanman discloses that its server is periodically updated, a POSITA would have understood that when information is stored on the client, Shanman discloses/renders obvious that the hub and the client conduct periodic communications to update the

inventory on the client. EX1004, 17:23-26 (“Irrespective of the manner in which the program is executed and stored, the basic operations, functions and transmission of information to the coupon server is essentially the same.”).

EX1002, ¶120.

5. [9d]

Shanman discloses this limitation. See [1e], [1b], [6c], [7b]. The server queries its database, which responds with both product location information and coupon information (additional product-related information). EX1004, 16:13-17 (“[i]n response to the consumer’s submission of the selected goods, the server searches its memory for any available coupons pertaining to the selected goods”). The coupon server processes the received signals to query the database to provide the product information including location. EX1004, 6:13-28 (“A coupon server . . . comprises . . . a processing unit having communication means . . . to the at least one consumer data processing unit, and being responsive to a connection with a consumer data processing unit), 8:11-22, 16:23-32 (“downloads a customized shopping list to the consumer data processing unit which may include a list of the selected goods along with their location in the selected retail outlet.”). Shanman discloses a method that queries a server’s database for product location information and additional product-related information. EX1004, Abstract, 7:37-65, 8:11-42. EX1002, ¶121.

6. [9e]

Shanman discloses this limitation. *See* [1f], [9c]. Shanman discloses that the server downloads the location information to the clients. EX1004, 8:28-42 (“Based on the consumer selections and the consumer identifying indicia, a server resident process locates and downloads to the consumer data processing unit for display . . . a shopping list identifying the selected goods, the location of such goods in the selected retail outlet”). A POSITA would have understood that at least because the list is “downloaded to” the client, that it is provided to the respective memory unit. EX1002, ¶122.

Further, and as discussed in [9c], when the clients run the program, product location information is stored on the clients. *See* [9c]. This information is periodically updated, so a POSITA would have understood, or found obvious, that when the store information is updated, the server (“hub”) will broadcast portions of the product location information from the hub to the respective memory units of each of the user interfaces by way of an update. EX1002, ¶123.

Further, Shanman discloses that when the method is accomplished by an executable stored on the client, the “customized shopping list” is provided to the respective memory unit of the client. EX1004, 17:33-35 (“Selection of goods by the consumer causes the program to communicate with the server to locate and download . . . a customized shopping list”). A customized shopping list includes

location information. EX1004, 1:14-20 (“a customized shopping list showing the location in a selected retail outlet of the goods selected by the consumer”). A POSITA would have understood that the client downloading the customized shopping list provides location information to the respective memory unit. EX1002, ¶124.

Additionally, a POSITA would have understood, or found obvious, that the executable permanently stored on the client could include product location information that could be downloaded with the “list of selected retail outlets and goods sold in those outlets.” EX1004, 17:17-19. EX1002, ¶125.

7. [9f]

See [1g], [9b]. Shanman discloses that output signals are provided via the user interface in real time while a customer is shopping in the store based upon the product location information because the monitor on the consumer data processing unit that was used to select the items for inquiry also displays their location and the requisite additional information. EX1004, 15:1-16:33 (“the monitor of the consumer data processing unit may display a customized list of goods available in the selected retail outlet”), *id.* (“The shopping list may be in tabular form listing the selected goods and the aisle in the retail outlet at which the goods are located, or may be in the form of a store layout diagram (similar to FIG. 4B) indicating the location of the selected goods.”).

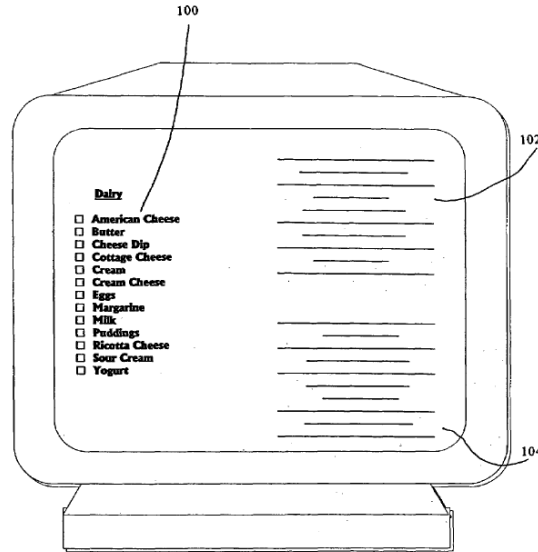


FIGURE 4B

EX1004, FIG. 4B (showing monitor displaying user-selectable shopping list).

SHOPPING LIST FOR YOUR SELECTED SUPERMARKET

	<u>Aisle No.</u>
Flour	4
Yeast	4
Cake Mix	4
Baking Accessories	4
Bottled Tea	5
Bottled Water	5
Soda	5
Bread Crumbs	6
Hamburger Rolls	6
White Bread	6
Bar Soap	3
Body Cream	3
Conditioner	3
Mouthwash	3
Razors	3
Shampoo	3
Apples	2
Bananas	2
Broccoli	1
Cabbage	1
Carrots	1
Cauliflower	1
Chicken	9
Cold Cuts	9
Hot Dogs	9
Lamb Chops	9

FIGURE 5

EX1004, FIG. 5, 15:1-16:33 (“An example of a shopping list is shown in FIG. 5.”).

A POSITA would have understood, or found obvious, the display of information on a display requires the provision of output signals to the display 24 by the video controller 40. EX1002, ¶126.

A POSITA would have understood, or found obvious, that Shanman’s disclosure of local area networks discloses providing output signals to customers in the store in real time. *See* [9b]; *see also* EX1004, 23:65-24:4 (“the techniques of the invention apply equally whether the user accesses a local area network”). EX1002, ¶127.

H. Claim 11.

See §V.A, §V.C, §V.G., EX1002, ¶128.

I. Claim 15

As shown below, Shanman in view of the knowledge of a POSITA renders claim 15 obvious. EX1002, ¶129.

1. [15pre]

See [1pre]. EX1002, ¶130.

2. [15a]

Shanman discloses this limitation. *See* [1a], [1b], [9a], [9c]. Shanman discloses providing a hub and user devices (e.g., “server” 10 and “clients” 12). EX1004, 6:5-57, 11:35-58, 12:24-40, 13:4-14:21, 14:26-31, 24:17-21, Figs. 1, 2. The clients each include a user interface (“user input device”), i.e., a client device

21 includes a keyboard 22, a mouse 23, and a display 24. EX1004, 6:5-57, 8:63-65, 13:4-42, 16:66-17:4, 22:9-12, and Fig. 2. The hub is in communication with the plurality of user interfaces (“A coupon server is located remotely from the consumer data processing units and comprises . . . a processing unit having communication means selectively connectable over communication medium to the at least one consumer data processing unit, and being responsive to a connection with a consumer data processing unit”). EX1004, 6:5-57, 11:35-58, 23:65-24:4, Fig. 1. EX1002, ¶131.

The server 10 includes storage (“the memory of the coupon server”) including a database (“one or more databases are set up on . . . the coupon server”). EX1004, 6:5-57, 11:35-58, 13:62-14:1, 15:22-31, 19:19-21, Figs. 2, 3. A POSITA would have understood that a server would be able to access its own memory that includes a database. EX1002, ¶132.

Shanman discloses using one or more databases that need not be located on the coupon server. EX1004, 19:14-33 (“one or more databases are set up on either the coupon server or another location”), 23:6-9 (“multiple databases could be used to store and process the information”). Shanman also discloses accessing a database by direct connection. EX1004, 11:35-38 (“The teachings of the present invention are applicable to many different types of networks, including computer networks, and may also be used, for instance, in conjunction with direct online

connections to databases”), 11:53-58 (“on-line database services”), 21:1-12

(“direct connection to a resource located on a server (i.e., a database)”).

Additionally, Shanman discloses database access by CGI and JDBC. EX1004, 22:49-56. A POSITA would have understood these means disclose providing the hub access to the database(s). EX1002, ¶133.

The databases include both product location information and additional product-related information. *See* [1b]; EX1004, 13:62-14:1 (“The internal memory of the coupon server is adequately large for storing . . . inventory data . . . and physical layout of the goods for sale, which must be periodically updated”). EX1002, ¶134.

3. [15b]

The recitation of what the “additional product-related information includes” is non-functional descriptive material that is not entitled to patentable weight. *See* §III.E. Regardless, Shanman discloses and/or renders obvious this limitation. *See* [1pre], [15a]; *see also*:

- **“information concerning a quantity of a first product within the store”**: EX1004, 6:33-54 (“name and inventory of goods”); 13:62-14:1 (“including inventory data”));
- **“information concerning a price of the product”**: EX1004, 7:51-60 (“retail price”), Abstract (“coupons”);

- **“information concerning an availability or unavailability of the product within the store”**: EX1004, 6:44-54 (“list of goods actually sold at the selected retail outlet”), 15:19-24 (“list of the goods offered for sale by that retail outlet”), 25:4-9 (“physical layout and inventory of goods at the selected retail outlet are displayed on the consumer data processing unit”);
- **“information linking the product with another product in a cross-referential manner”**: EX1004, 9:30-36, 10:16-28, 10:39-46, 21:13-30 (“brands, type of goods, category of goods”), 10:39-46 (“consumer interests and purchasing habits”), 10:16-28 (“competing brands”), 22:3-8 (“competitive source”), 5:37-59 (“brand preferences”), 7:47-65 (“a different brand of the same type of goods”), 21:35-42 (“another brand”).

A POSITA would have further understood, or found obvious, that Shanman’s disclosure of alternatives discloses storing information that linked the product with another in a cross-referential manner. EX1004, 17:40-54 (“select choices from a list of alternatives”).

EX1002, ¶135.

In addition to the last bullet point directly above, the server includes additional product-related information linking a product with another product in a cross-referential manner because it is constructed to be capable of being “indexed

by any one of a multitude of identifiers, such as any element of consumer identifying indicia, or any element of selected information, such as preferred retail outlets, preferred brands, type of goods, [and] category of goods.” EX1004, 21:13-30. This includes linking products by category (i.e., data linking a product to a different product) and location (i.e., data linking a product to a different type of product) within the store. EX1004, 15:19-54, (“Instructional text 104 and targeted advertising text 106 accompany the list of goods”). A POSITA would have understood that the Shanman database includes cross-referential linking between products because Shanman discloses that the products are indexed (i.e., linked and cross-referenced) by brand, type, and category. EX1002, ¶136.

Shanman discloses additional linking between products in the database in a cross-referential manner. Specifically, a POSITA would have understood that Shanman discloses that the database links products using cross-references to allow for cross-promotional coupons to be sent to the user. EX1004, 10:16-28 (“selections of goods made by the consumer are transmitted to the coupon server . . . [a]dditional promotional information and purchase incentives may also be sent, such as coupons for competing brands of selected goods”), 10:39-56 (“In addition, purchase incentives in addition to selected coupons may be targeted based upon a consumer’s coupon selections”). EX1002, ¶137.

To the extent that it is determined that Shanman does not disclose “information linking the product with another product in a cross-referential manner,” Shanman renders it obvious. For example, Shanman discloses that a customer may be provided with, in addition to the location of a desired good, additional information including “a different brand of the same type of goods may be purchased at increased savings.” EX1004, 7:49-65. It would have been obvious to a POSITA that if the memory in Shanman’s server is configured to provide information to a customer about a desired good A that includes information about a different good B of the same type and different brand, then the memory in Shanman’s server would also be configured to provide information about a desired good B that includes information about competing good A. It would further have been obvious to a POSITA to accomplish this functionality by linking good A with good B in a cross-referential manner because linking products in a cross-referential manner was well known to a POSITA at the time of the ’690. *See, e.g.*, EX1006, 15:49-50 (“[e]ssential items could also be **linked to** or marked with alternative products” (emphasis added)). EX1002, ¶138.

4. [15c]

See [1c], [9b], [9c]. EX1002, ¶139.

5. [15d]

See [1c], §V.D., 9[b]. EX1002, ¶140.

6. [15e]

See [1e]. EX1002, ¶141.

7. [15f]

See [1f], [1g], [9f], §V.B. EX1002, ¶142.

8. [15g]

Shanman discloses this limitation. The disclosed network includes the internet through cellular and wireless local area networks. EX1004, 11:53-58 (“the present invention applies to any type of network, including local and wide area networks, private networks, on-line subscription services, on-line database services, public networks including the internet and the World Wide Web, television networks, satellite networks, and wireless networks”). EX1002, ¶143.

J. Claim 16.

See §V.I., [1a]. EX1002, ¶144.

K. Claim 17.

See §V.I., §V.J., [1a], [9b]. EX1002, ¶145.

VI. GROUND 2: OGASAWARA AND BEACH RENDER OBVIOUS CLAIMS 15 AND 16

A. Claim 15

As shown below, Ogasawara in view of Beach renders claim 15 obvious.
EX1002, ¶146.

1. [15pre]

Ogasawara discloses the preamble under any reasonable construction of “within a first store,” including a construction under which “within a first store” specifies a particular location within a store in which a product is located and under which “within a first store” specifies a location in which the customer is located when the product location is received. EX1005, 1:8-10 (“a computer based system for locating a customer’s position within a shopping store and displaying product and location information”), Abstract, 2:8-13, Fig. 8. EX1002, ¶147.

2. [15a]

Ogasawara discloses this limitation. Ogasawara discloses providing claimed “hub” (Ogasawara’s “store central computer,” an embodiment of which is the core server 50 in Fig. 1) that is capable of accessing a database (Ogasawara’s “merchandise item database 55”, which is illustrated in Fig. 1 as a mass storage memory device using the same symbol as the “local storage apparatus 30” of Fig. 1, which is described as, *inter alia*, a “hard disk drive”). EX1005, Abstract, 2:27-46, 4:36-67, 5:9-6:10, Figs. 1, 6. Ogasawara further discloses that the hub is in communication with a plurality of mobile terminals 5 (each being or including a claimed “user interface”) via RF communications. EX1005, 5:42-46 (“the mobile personal shopping terminal 5 communicates, via RF energy, with a retail store’s core server 50 for purposes of accessing the retail facility’s database 55”).

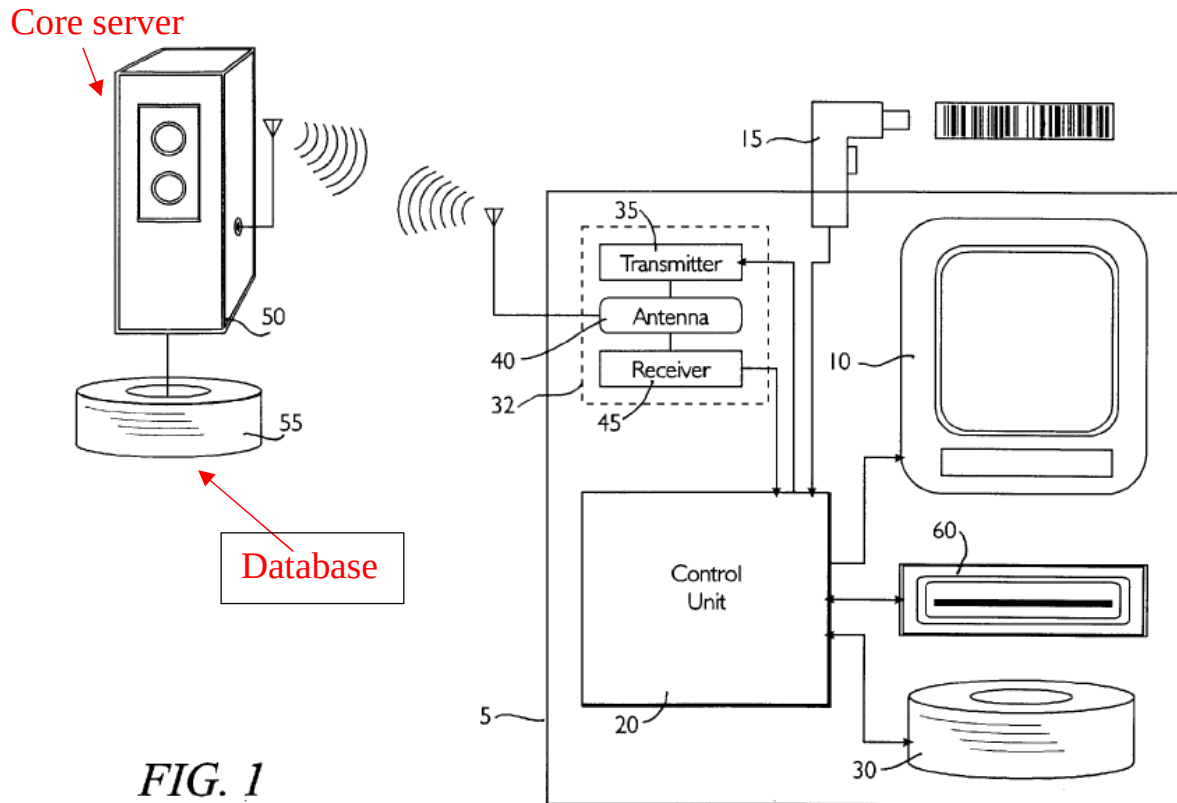


FIG. 1

EX1005, Fig. 1 (red annotations added). EX1002, ¶148.

Ogasawara's database 55 includes a Product Look-up Table ("PLU") as shown in Fig. 6:

PLU Table

302 SKU	304 ITEM Information Brand Name Generic Name	306 Price	310 Location Information
00001	(Brand Name) Apples	\$1.99	Location-a
00002	(Brand Name) Tissues	\$2.99	Location-b
00003	(Brand Name) Spice	\$4.99	Location-c
00004	(Brand Name) Spice	\$3.29	Location-c
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

300

FIG. 6

EX1005, 2:41-46, 6:60-7:1, 8:1-34, 19:25-27 (“the item database is resident in a memory location of the store computer”), 7:55-57 (“the PLU table contains an entry for each and every item stocked by the store”). EX1002, ¶149.

The PLU in the database 55 includes product location information 310. EX1005, 7:44-47 (“a product location information entry 310 is associated with the merchandise specific information set 300, such that each item entry comprising the merchandise information set is associated with a specific location entry”). EX1002, ¶150.

The PLU in the database 55 also includes “additional product-related information” such as current stock and price. EX1005, 7:34-35 (“each item entry includes a price field 306”), 5:43-56 (“Up-to-date pricing information, as well as the status of current store inventory are illustrative of the type of information comprising the retail facility database 55 the quantity of that item may be decremented in the database so that a current running total inventory may be maintained”). EX1002, ¶151.

3. [15b]

Ogasawara discloses and, in combination with Beach, renders obvious this limitation. *See* [15a]. The recitation of what the “additional product-related information includes” is non-functional descriptive material that is not entitled to patentable weight. *See* §III.E. Regardless, Ogasawara’s database 55 includes the following additional product-related information:

- **“information concerning a quantity of a first product within the store”**: EX1005, 5:43-56 (“Up-to-date pricing information, as well as the status of current store inventory are illustrative of the type of information comprising the retail facility database 55 the quantity of that item may be decremented in the database so that a current running total inventory may be maintained”).

- **“information concerning a price of the product”**: The PLU in Ogasawara’s database 55 includes the price for each product. EX1005, 7:34-35 (“each item entry includes a price field 306”); *see also* Fig. 6.
- **“information concerning an availability or unavailability of the product within the store”**: See first bullet point above. A POSITA would have understood that the quantity of a product in the store indicates its availability or unavailability.
- **“information linking the product with another product in a cross-referential manner”**: Ogasawara discloses cross-referential identification indicia for each product (e.g., brand name, generic name). Figs. 6, 7; EX1005, Abstract, 2:41-46, 3:42-48, 6:60-7:67, 8:1-34 (“A specific product location would be associated with the generic term ‘spice’ the item information field 312 provides a means of linking the location information field 314 of the location table 350 to any particular one of the items listed in the product table 300A in order that any item’s location information may be accessed and displayed”), Figs. 6, 7. A POSITA would understand Ogasawara’s disclosure of links between “generic” and “specific” entries in the database discloses cross-referential links between

products. Ogasawara further discloses linking or associating a product in the customer's profile in the database with a recommended promotional item in a cross-referential manner. EX1005, 3:42-48 (“[b]ased on the customer's personal profile, either the mobile terminal or the store central computer develops recommended promotional items which a customer with that profile would likely purchase. A closest promotional item to the customer's calculated current location is then identified as the desired destination item and the mobile terminal displays those directions to the customer.”). It would have been obvious to a POSITA to implement the closest promotional item disclosed in Ogasawara by including cross-referential links between two products.

EX1002, ¶152.

In the event PO argues that Ogasawara does not disclose product location availability information, a POSITA would have found it obvious to modify Ogasawara to include that feature based on Beach. It was well-known in the art and customary to provide information regarding products availability (e.g., whether the product is in stock). For example, Beach discloses providing responses if an item is not available. EX1006, 14:29-31 (“The item prompts would also be turned off in the event the central host determines that the product is out of stock.”). Beach,

Ogasawara, and the 260 patent are analogous art, as they all relate to interactive multimedia information retrieval systems. EX1001, 9:2-5; EX1005, 4:61-67; EX1006, 9:5-8. A POSITA would have been motivated to combine Ogasawara with Beach in order to improve the offering of Ogasawara by also providing the customer with information regarding whether an item is available. A POSITA would have had a reasonable expectation of success in so doing because incorporating information regarding product availability was well-known to a POSITA at the time of the 260 patent and involved no more than routine skill. EX1002, ¶153.

In the event PO argues that Ogasawara does not disclose linking a product with another product in a cross-referential manner, a POSITA would have found it obvious to modify Ogasawara to include that feature based on Beach. It was well-known in the art and customary for a product database to include links between products in a cross-referential manner. For example, Beach discloses links between products in a cross-referential manner to offer product-specific alternatives. EX1006, 15:49-50 (“[e]ssential items could also be **linked to** or marked with alternative products” (emphasis added)). A POSITA would understand that it would be obvious to modify Ogasawara to include product-specific “alternatives” using a cross-reference link in the database. EX1002, ¶154.

In light of Ogasawara’s disclosure of including “a shopping list or a recommended replenishment item list” (EX1005, Abstract), a POSITA would have been motivated to combine Ogasawara with Beach in order to improve the offering of Ogasawara by also providing product-specific alternatives to the customer for those lists. Moreover, the feature of linking two products as product-specific alternatives to each other in a cross-referential manner enables the customer to navigate through products in the store more efficiently and finding alternative products quickly. A POSITA would have had a reasonable expectation of success in so doing because linking two items in a database was well-known to a POSITA at the time of the 260 patent and involved no more than routine skill. EX1002, ¶155.

4. [15c]

Ogasawara discloses this limitation. *See* [15a]; see also [15e]-[15f] below. A POSITA would understand that the communications described in [15e]-[15f] below are periodic in the sense that they occur from time to time as a result of customer use of Ogasawara’s system. EX1002, ¶156.

5. [15d]

Ogasawara discloses this limitation. *See* [15a]. Ogasawara discloses that the mobile terminal enables a customer to make inquiries regarding the location of a product. EX1005, 6:54-59 (“the customer location recognition feature is able to

respond to customer prompts, by which a ***customer may further make inquiries about the location*** and direction ***of any specific item*** in the retail facility”

(emphasis added)), 8:62-65 (“when a customer desires to purchase an item, or to initialize the customer location recognition feature of the mobile terminal, the customer scans an item’s UPC bar code . . . using the UPC bar code scanner 15 provided on the mobile terminal.”), *id.* (“The item’s UPC code is processed by the mobile terminals control unit which may extract a particular items SKU code from the UPC code and transmits the item’s SKU number to the retail facility’s core server (50 of FIG. 1) by means of its internal RF transceiver circuitry”); see also 8:55-9:7. EX1002, ¶157.

6. [15e]

Ogasawara discloses or renders obvious this limitation. See [15a].

Ogasawara discloses querying a database in response to an inquiry signal to obtain product location and direction information. EX1005, 2:41-46, 6:54-59 (“a customer may further make inquiries about the location and direction of any specific item in the retail facility”), 9:3-15 (“once a match is made between a scanned item’s SKU code and an SKU field of an item entry, the core server 50 accesses the item entry and transmits the information contained therein to the mobile terminal. At the same time, the store’s core server accesses the item’s product location information from its associated product location information file

entry”), 5:42-46 (“the mobile personal shopping terminal 5 communicates, via RF energy, with a retail store’s core server 50 for purposes of accessing the retail facility’s database 55”). EX1002, ¶158.

7. [15f]

Ogasawara discloses this limitation. *See* [15d] Ogasawara discloses providing information signals in response to the inquiry signals for receipt by the user interfaces (“mobile terminals”). EX1005, 9:9-11 (“the core server 50 . . . transmits the information contained therein to the mobile terminal.”). Ogasawara discloses the information signals include both product location information and information about the direction of a product. EX1005, 2:41-46, 6:54-59 (“a customer may further make inquiries about the location and direction of any specific item in the retail facility”), 9:8-15 (“once a match is made between a scanned item’s SKU code and an SKU field of an item entry, the core server 50 accesses the item entry and transmits the information contained therein to the mobile terminal. At the same time, the store’s core server accesses the item’s product location information from its associated product location information file entry”). The direction information is a type of “additional product-related information.” To the extent that this limitation is construed as requiring one of the types of “additional product-related information” recited in [15b], a POSITA would have found it obvious to include, *e.g.*, price information from the PLU in

addition to the location information from the PLU for the product. A POSITA would have been motivated to do so in order to provide for greater customer satisfaction and convenience. A POSITA would have had a reasonable expectation of success in making this modification as it involves only minimal skill. EX1002, ¶159.

Ogasawara also discloses that the mobile terminal provides an output signal to an output device (e.g., “LCD display panel”). EX1005, 2:59-60 (“[d]irection and distance information, i.e. aisle and shelf number, is displayed on the mobile terminal display’s panel”), (“Pressure sensitive (touch screen) technology may be incorporated into the display 10 so that a shopper may access the mobile terminal 5 by merely touching certain portions of the screen”). In order to display this information, a POSITA would have understood that the LCD display panel is necessarily driven by a signal (the “output signal”), or at least would have found this obvious.

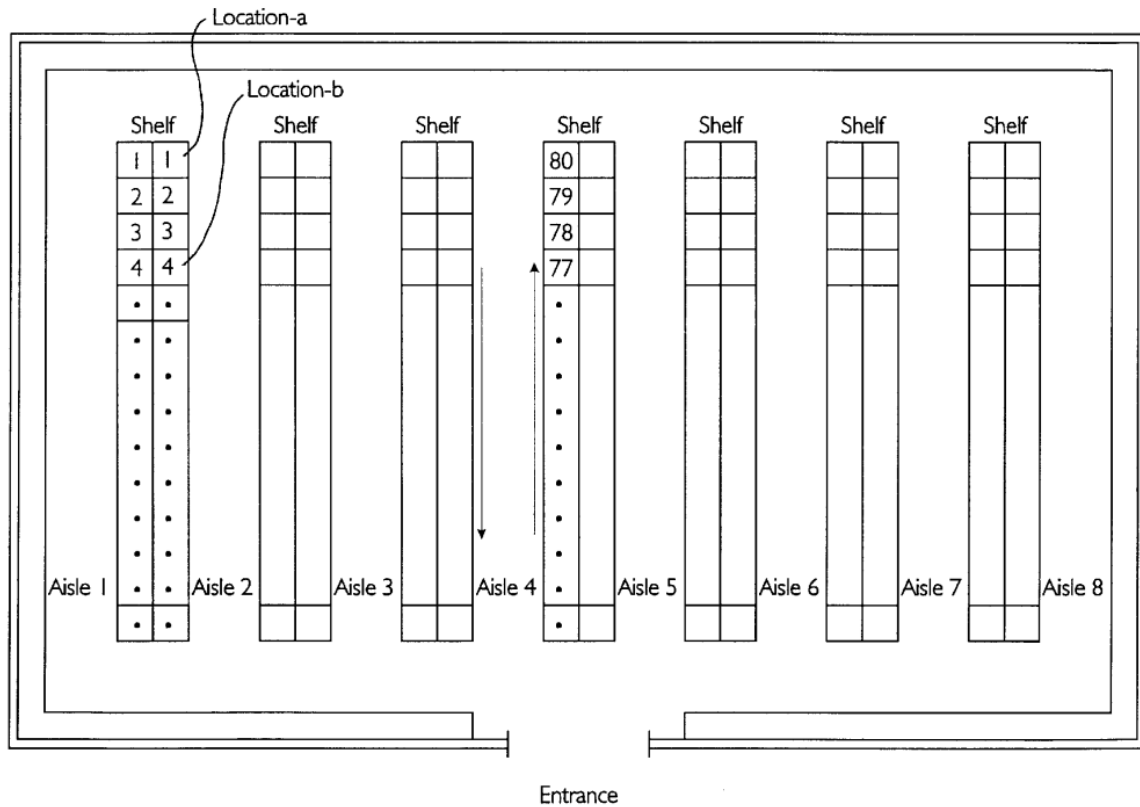


FIG. 8

Id., Fig. 8 (showing product locations). EX1002, ¶160.

8. [15g]

Ogasawara discloses this limitation. Ogasawara discloses that the user interface is in wireless communication with the hub. EX1005, 5:19-21 (“Communication between the mobile personal shopping terminal 5 and the external information source terminal is implemented by a wireless communication”), 2:65-3:1 (“The mobile terminal may then transmit the shopping list to the store central computer using the RF communication transceiver.”). A

POSITA would understand that the store central computer of Ogasawara is disclosure of a central hub. EX1002, ¶161.

B. Claim 16.

Claim 15, from which this claim depends, is obvious over Ogasawara in view of Beach as shown above. Ogasawara discloses claim 16’s limitation, so claim 16 is obvious. See §VI.A. Ogasawara’s user interface is provided by the mobile terminal. EX1005, 4:61-67 (“Pressure sensitive (touch screen) technology may be incorporated into the display 10 so that a shopper may access the ***mobile terminal 5*** by merely touching certain portions of the screen.” (emphasis added)), 2:59-60 (“[d]irection and distance information, i.e. aisle and shelf number, is displayed ***on the mobile terminal display’s panel***” (emphasis added)). EX1002, ¶162.

VII. DISCRETIONARY DENIAL IS NOT WARRANTED

A. 35 U.S.C. § 314(a) *Fintiv* Analysis

1. Stay

No stay has been sought by any party. Thus, this factor is neutral.

2. Trial Date

Under the Interim Guidance, Factor 2 favors institution because the expected Final Written Decision (“FWD”) date here, around June 2025, is about three months before the anticipated district court trial date as computed in accordance with the Interim Guidance, *i.e.*, September 2025 (29.1 months from the 4/11/2023).

See EX1007 (<https://www.uscourts.gov/statistics/table/na/federal-court-management-statistics/2023/06/30-1>) at 53 (median time-to-trial of 29.1 months); EX1008 (Complaint filed on 4/11/2023).

The district court's currently-scheduled trial date for the parties' WDWI litigation is 6/2/2025, see EX1009, 9—about the same time as the anticipated statutory deadline for a Final Written Decision in this proceeding. Thus, this factor should favor institution even using the currently scheduled trial date. Moreover, as the Director has recently observed, scheduled trial dates “are unreliable and often change” and a court’s scheduled trial date is therefore “not by itself a good indicator of whether the district court trial will occur before the statutory deadline” for a FWD. EX1018, 8.

The three earlier-filed district court cases asserting the 260 patent, none of which involve Petitioner, should not change the analysis because Petitioner Home Depot is unrelated to any of the defendants (IKEA, Target, and Best Buy) in those cases, those other defendants have no involvement in this IPR, and different technology is at issue in those earlier-filed cases. *TCT Indus. Holdings Co., Ltd. v. ParkerVision, Inc.*, IPR2021-00990, Paper 9 at 28-29 (PTAB Nov. 22, 2021).

3. Investment in Parallel Proceeding

The WDWI litigation² between the parties is in its very early stages. Fact discovery has barely even started—with Petitioner having only recently responded to an initial sets of document requests and interrogatories. Even more fundamentally, neither the district court nor the parties have invested substantially in the merits of the invalidity grounds in this IPR, nor will they have done so by the projected date for an institution decision. Even assuming that the district court’s existing scheduling order holds: PO’s preliminary disclosure of infringement contentions is not due until 1/4/2024; Petitioner’s preliminary disclosure of invalidity contentions is not due until 3/21/2024; and the parties’ exchange of claim terms and proposed constructions, and their responses thereto, are not due until 4/11/2024 and 4/25/2024, respectively. In contrast, much work will remain to be done after the institution decision for this IPR: The parties’ opening and rebuttal expert reports are due on 5/31/2024 and 6/28/2024, respectively; and their dispositive motions and any motions seeking judicial construction of claim terms are not due until 12/6/2024. Thus, the district court in the parties’ WDWI litigation will not issue any claim construction order or take

² The state of the three earlier-filed district court cases asserting the 260 patent is not relevant to this analysis. *See TCT Indus. Holdings Co.*, IPR2021-00990, Paper 9 at 29-31 (considering only investment in parallel litigation concerning petitioner despite patent owner’s assertion regarding effort in litigation concerning unrelated third party).

any substantive action on any invalidity position until long after the institution decision here.

In *Sand Revolution II*, the parties had already “exchanged infringement and invalidity contentions, and the district court ha[d] conducted a *Markman* hearing and entered a related Order.” *Sand Revolution II* at 10. Despite these facts, the Board found that the third *Fintiv* factor “weighs only marginally, if at all, in favor of exercising discretion to deny institution.” *Id.* at 10-11 (“recogniz[ing] that much work remains in the district court case as it relates to invalidity: fact discovery is still ongoing, expert reports are not yet due, and substantive motion practice is yet to come.”). Here, substantially more work remains to be done as to invalidity. That the district court will not have either held a *Markman* hearing or issued a claim construction order underscores that no significant investment of resources would be wasted upon the Board’s institution. This factor therefore weighs strongly against exercising discretion.

Moreover, this Petition is being filed ***before*** PO’s service of infringement contentions and almost six months prior to the one-year statutory deadline. EX1017 (acceptance of service on 5/5/2023). This diligence further indicates that this factor weighs against exercising discretion to deny this Petition.

4. Issue Overlap

This Petition focuses on two distinct grounds of invalidity—Shanman, and the combination of Ogasawara and Beach—that have not been raised in any of the earlier-filed cases.³

Nevertheless, to eliminate any potential overlap of issues, Petitioner stipulates that if the Board institutes IPR, Petitioner will not assert invalidity of the Challenged Claims in the parties' WDWI litigation using the any of the primary references used in the grounds asserted in this Petition. This stipulation is broader than a *Sand Revolution* stipulation and less restrictive than a *Sotera* stipulation. Thus, this factor weighs against discretionary denial. *Sophos Ltd. v. Open Text Inc.*, IPR2023-00699, Paper 17 at 10 (PTAB October 11, 2023).

5. Same Party

Home Depot's status as both Petitioner here and as Defendant in the WDWI litigation weighs against exercising discretion to deny institution because, based on the expected dates for a FWD on this Petition and trial in the district court, Home Depot will be subject to the estoppel provisions of 35 U.S.C. § 315(e)(2). *Samsung*

³ Although Target asserted obviousness of claims 1-4, 6 and 7 in view of Asthana, Ogasawara and Rowley, obviousness of claim 9 in view of Asthana and Rowley, obviousness of claims 9, 11 and 17 in view of Ogasawara and Rowley, and obviousness of claims 15 and 16 in view of Ogasawara, none of them address the invalidity of all of these claims based on Shanman or on the combination of Ogasawara and Beach. Petitioner is not aware of IKEA's invalidity positions.

Elecs. Co., Ltd. v. Staton Techiya, LLC, IPR2022-00302, Paper 13 at 18-19 (PTAB July 11, 2022); *CrowdStrike, Inc. v. Open Text Inc.*, IPR2023-00289, Paper 7 at 16 (PTAB July 21, 2023). At worst, this should be considered a neutral factor. *Snap, Inc. v. SRK Tech. LLC*, IPR2020-00820, Paper 15 at 16 (PTAB Oct. 21, 2020) (precedential in relevant part); *see also Samsung Elecs. Co., Ltd. v. DoDots Licensing Solutions LLC*, IPR2023-00621, Paper 9 at 15 (PTAB Oct. 11, 2023).

If the Board considers PO's earlier-filed cases involving the 260 patent in connection with this factor, it still weighs in favor of institution because the Petitioner unrelated to the defendants in those other cases. *Fintiv*, IPR2020-00019, Paper 11 at 13-14.

6. Other Considerations

Other considerations weigh very strongly against a discretionary denial.

There is compelling evidence to institute inter partes review of the 260 patent because the Petition presents compelling evidence of unpatentability in light of (a) Shanman and (b) the combination of Ogasawara and Beach, such that, if unrebutted in trial, would lead to a conclusion that the Challenged Claims are unpatentable by a preponderance of the evidence (EX1018, 4-5) and therefore invalid.

B. 35 U.S.C. § 325(b) Analysis

Applying the two-part framework discussed in *Advanced Bionics*, the Board should not exercise its § 325(d) discretion to deny institution. Neither of the challenges raised in this Petition are substantially the same as those considered during prosecution because none of Ogasawara, Beach, or Shanman which were considered during prosecution of the 260 patent.

In the event that the challenges herein are found to be based on prior art that is the same as or cumulative to prior art considered during prosecution, the examiner has made a clear error in allowing the claims over such prior art at least because the challenges in this Petition satisfy the compelling merits standard.

VIII. COMPLIANCE WITH FORMAL REQUIREMENTS

A. Mandatory Notices Under 37 C.F.R. §§ 42.8(b)(1)-(4)

1. Real Party-In-Interest

Home Depot USA, Inc. and Home Depot Solutions LLC (“Petitioner”) are the real party-in-interest.

Petitioner identifies The Home Depot, Inc. as a potential RPI solely because it was a named defendant in the WDWI Litigation.

2. Related Matters

The 260 patent is subject to the following actions:

- *Innovaport LLC v. IKEA North America Services, LLC et al.*, No. 2:21-cv-00789 (E.D. Wis. filed June 25, 2021)

- *Innovaport LLC v. Target Corporation*, No. 3:22-cv-00425 (W.D. Wis. filed Aug. 4, 2022)

- *Innovaport LLC v. Best Buy Co., Inc.*, No. 3:23-cv-00016 (W.D. Wis. filed Jan. 6, 2023)

- *Innovaport LLC v. Home Depot U.S.A., Inc., et al.*, No. 3:23-cv-00225 (W.D. Wis. filed Apr. 11, 2023)

- *Innovaport LLC v. Walmart Inc.*, No. 3:23-cv-00498 (W.D. Wis. filed July 21, 2023)

3. Lead and Backup Counsel

Lead Counsel	Backup Counsel
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4. Service Information

Service information for lead and backup counsel is provided in the designation of lead and backup counsel above. Petitioner consents to electronic service by email to:

HomeDepot-Innovaport-IPR@us.dlapiper.com

B. Proof of Service on the Patent Owner

As identified in the attached Certificate of Service, a copy of this Petition in its entirety is being served electronically on PO's attorney by agreement of the parties and pursuant to 37 C.F.R. §§ 42.6 & 42.105(b).

C. Power of Attorney

Powers of attorney are being filed with designation of counsel in accordance with 37 C.F.R. § 41.10(b).

D. Standing

In accordance with 37 C.F.R. § 42.104(a), Petitioner certifies that the 260 patent is available for *inter partes* review and that Petitioner is not barred or estopped from requesting an *inter partes* review challenging the patent claims on the grounds identified in this Petition.

E. Fees

The undersigned authorizes the Director to charge the fee specified by 37 C.F.R. § 42.15(a) and any additional fees that might be due in connection with this Petition to Deposit Account No. 503266.

IX. CONCLUSION

All claims of the 260 patent should be found unpatentable for the reasons discussed in this Petition.

	Respectfully submitted, <u>/s/ Jennifer Librach Nall</u> Jennifer Librach Nall Reg. No. 57,053 <i>Attorney for Petitioner</i>
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CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), Petitioner certifies that this petition includes 13,255 words, as measured by Microsoft Word, exclusive of the table of contents, mandatory notices under § 42.8, certificates of service, word count, claim listing, and exhibits.

CERTIFICATE OF SERVICE

The undersigned certifies pursuant to 37 C.F.R. §§ 42.6(e) and 42.105 that on November 28, 2023, a true and correct copy of the Petition for *Inter Partes* Review of U.S. Patent No. 8,775,260 challenging Claims 1-4, 6, 7, 9, 11 and 15-17 and all Exhibits was served by emailing a copy of same (by agreement) to the following attorneys of record for the Patent Owner:

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Respectfully submitted,

/s/ Jennifer Librach Nall

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