

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Walt Disney Parks and Resorts U.S., Inc.,

Petitioner,

v.

Agile Journeys LLC,

Patent Owner.

PTAB Case No. IPR2024-00029

U.S. Patent No. 7,212,983 B2

PRELIMINARY RESPONSE TO PETITION FOR
INTER PARTES REVIEW OF U.S. PATENT NO. 7,212,983 B2

Table of Contents

I.	Introduction.....	5
II.	Precise Relief Requested	7
III.	Overview of the '983 Patent.....	7
A.	Background.....	7
B.	Previously Considered Prior Art.....	10
C.	Prosecution of the '983 Patent	16
IV.	Claim Construction	20
V.	The Claims of the '983 Patent Are Valid	21
A.	Ground 1: Sim in View of Doi.....	21
	1. Independent Claim 1	21
	2. Independent Claim 3	29
	3. Dependent Claim 5	29
	4. Dependent Claim 7	31
	5. Dependent Claim 8	33
	6. Dependent Claim 10	33
	7. Dependent Claim 11.....	35
	8. Dependent Claim 17	36
	9. Dependent Claim 19	36
	10. Dependent Claim 20	37
	11. Dependent Claim 22	38
	12. Dependent Claim 23	39
	13. Dependent Claim 24	40
	14. Dependent Claims.....	40
B.	Ground 2: Sim (as Modified by Doi) in View of Waytena.....	40
	1. Dependent Claim 4	41
	2. Dependent Claim 18	42
	3. Dependent Claim 21	43
C.	Ground 3: Waytena alone.....	44
	1. Independent Claim 1	44
	2. Independent Claim 3	57

3.	Dependent Claim 4	57
4.	Dependent Claim 5	58
5.	Dependent Claim 8	58
6.	Dependent Claim 10	59
7.	Dependent Claim 13	60
8.	Dependent Claim 17	60
9.	Dependent Claim 18	61
10.	Dependent Claim 19	62
11.	Dependent Claim 20	63
12.	Dependent Claim 21	63
13.	Dependent Claim 23	64
14.	Dependent Claim 24	65
15.	Dependent Claims.....	65
D.	Ground 4: Waytena in View of Herz.....	65
E.	Ground 5: Waytena (Alone or as Modified by Herz) in View of Doi	70
F.	Ground 6: Waytena (Alone or as Modified by Herz) in View of Doi	70
1.	Dependent Claim 11.....	70
2.	Dependent Claim 22	71
VI.	Conclusion	71

Table of Authorities**Cases**

<i>3M Innovative Props. Co. v. Avery Dennison Corp.</i> , 350 F.3d 1365 (Fed. Cir. 2003)	21
<i>Circuit CheckInc. v. QXQInc.</i> , 795 F.3d 1331 (Fed. Cir. 2015)	66
<i>In re Clay</i> , 966 F.2d 656 (Fed. Cir. 1992)	66
<i>In re Fine</i> , 837 F.2d 1071 (Fed. Cir. 1988).....	41, 66, 70, 71

Other Authorities

MPEP § 2143.03	41, 66, 70, 71
----------------------	----------------

Regulations

37 C.F.R. § 42.100(b).....	21
----------------------------	----

I. Introduction

Patent Owner Agile Journeys LLC (“Agile Journeys” or “Patent Owner”) submits this Patent Owner Preliminary Response to the Petition for Inter Partes Review (“Petition”) of U.S. Patent No. 7,212,983 (EX1001, “’983 Patent”) filed by Walt Disney Parks and Resorts U.S., Inc., (“Disney” or “Petitioner”).

Petitioner asserts that claims 1, 3-5, 7-8, 10-14, and 16-25 of the ’983 patent are unpatentable on six grounds based on 35 U.S.C. §§ 102 and 103. *See* Petition, p.5.

This Preliminary Response is timely filed based on the Board’s Notice Of Filing Date Accorded To Petition And Time For Filing Patent Owner Preliminary Response. *See* Paper 3.

The Petitioner states that in the ’983 Patent, “[s]elected attractions are then used to create a custom itinerary the party can view as they navigate their day.” Petition, p.1. In contrast to prior art where attractions are *manually* selected, the itinerary in the ’983 Patent comprises attractions that are *automatically* selected. Preparation of an itinerary from manually selected attractions or destinations was well-known in the art at the time as observed by the ’983 Patent. EX1001, 4:1-5:47.

This distinction is critical, as Petitioner subsequently mischaracterizes the ’983 Patent, stating “[t]he claims broadly recite on their face a computer that ‘selects’ attractions.” Petition, p.3. Actually, claims 1 and 3 are more limited than

Petitioner's assertion, each reciting "said itinerary comprising a second set of attractions," and "*software that selects* said second set of attractions," and "said data substantially matches with said information." *See* EX1001, claims 1 & 3 (emphasis added).

In the prior art, it is the *user* who selects the individual attractions for which reservations are sought. The prior art cited during prosecution of the '983 Patent, both by the Examiner and the Applicant, as well as the prior art relied on by Petitioner, includes systems where software assists users by narrowing down a list of attractions. For example, the '983 Patent discloses U.S. Pat. No. 5,940,803 ("Kanemitsu"), in which Kanemitsu discloses associating destinations with a variety of categories, EX1001, 5:8-9; during prosecution, the Examiner cited U.S. Pat. No. 5,978,770 ("Waytena") (EX1007), which discloses that "the patron may also be presented with a list of attractions that match the particular preferences of the members of the patron's group or that are in relative proximity to the patron's current location" Waytena, 14:21-24; and here, Petitioner cites U.S. Pat. No. 6,983,066 ("Doi") (EX1006), which suggests an alternative attraction with a shorter queue than the one the users are currently in. Doi, 9:63-10:3. In all these cases, the traveler/patron/customer decides what to accept from the reduced list of attractions.

II. Precise Relief Requested

The Board should deny institution because Petitioner has failed to demonstrate a reasonable likelihood of prevailing as to any challenged claim because none of its six grounds disclose all elements of any of the asserted claims.

III. Overview of the '983 Patent

A. Background

The inventors of the '983 Patent, William Redmann and Michael Eaton, are both former employees of Disney.

Mr. Redmann holds a Master of Engineering from the University of California, Los Angeles. He is a Fellow of the Society of Motion Picture and Television Engineers (SMPTE), and currently chairs the SMPTE Technical Committee 30MR Metadata Registers.

Mr. Redmann worked for Disney at WED Enterprises for approximately two years as a show designer for EPCOT beginning in 1982. He later worked at Walt Disney Imagineering in Research and Development where he developed new ride technologies. Mr. Redmann also worked as a Director of Technology for Walt Disney Imagineering and Disney Regional Entertainment from 1995 to 2000, where he worked designing and fielding DisneyQuest and developed and

managed 18 high-technology attractions from inception through commercial deployment and operation.

Mr. Redmann is a prolific inventor who is a named inventor or co-inventor on more than 80 issued United States Patents, including at least twelve assigned to Disney.

Mr. Eaton worked as a travel-industry marketing supervisor in the Walt Disney Resort division from 1990 until 1997, where he packaged and marketed Disney tourism products through various global wholesale and retail distributors and supported general marketing campaigns of new Disneyland and Walt Disney World properties.

In the Spring of 2001, long after leaving Disney, Mr. Redmann and Mr. Eaton began discussing solutions to problems they perceived in conventional theme park experiences. They conceived of solutions to these problems and reduced their solutions to writing, filing a patent application (U.S. Patent Application No. 09/858,376, which later issued as the '983 Patent) on May 15, 2001. In the ensuing months, Mr. Redmann and Mr. Eaton produced an actual implementation of the invention.

Petitioner mischaracterizes the present invention in at least four ways:

A 'computer' ('portable computer 100') accesses this party information and attraction data and uses it to 'select' a 'second set' of attractions from the first set . . . The selected attractions can then be

used to create a ‘customized’ itinerary that can be displayed on the party’s computer’s screen (‘display 130’).

Petition, p.6¹.

First, “portable computer 100” is one embodiment of the recited “computer,” but not a limitation of claims 1 and 3.

Second, the customized itinerary of claims 1 and 3 *comprises* the second set of attractions; there is no additional step required to create the customized itinerary. The selected attractions, *i.e.*, the second set of attractions, are, at least, part of the customized itinerary.

Third, as maintained by the Applicants and accepted by the Examiner, the ordinary meaning of the recited element “software that selects said second set of attractions” explicitly rules out manual selection (whether assisted by software or not) of the attractions to be incorporated into the itinerary. *See* EX1002 pp.9-10, ¶4; p.20, ¶2.

Fourth, the itinerary is displayed on a “presentation means,” which, in some embodiments, is the “display 130” of the party’s “portable computer 100.” It is important to note that “display 130” is not a limitation of the claim.

¹ Emphasis and citations omitted throughout unless indicated otherwise

B. Previously Considered Prior Art

Petitioner's asserted art, such as Sim and Doi, add nothing new beyond what was already considered during the prosecution of the '983 Patent. Petitioner raises the same or substantially the same arguments previously considered by the Examiner.

The discussion below references the following art of record:

Laval (6,173,209)	EX2005
Mahoney (5,502,806)	EX2006
Libby (5,850,617)	EX2007
Kanemitsu (5,940,803)	EX2008
Waytena (5,978,770)	EX1007

Petitioner raises new art to support its assertions that claims 1 and 3 of the '983 Patent are obvious. However, the elements of each newly asserted reference were already present in the prior art of record and had already been considered. The newly asserted art is thus cumulative of the previously considered art. *See* Declaration of Dr. Gregory Gonsalves ("Gonsalves Decl.") (EX2001); *see also* Detailed Comparison Table (EX2002) (comparing Sim and Doi with the prior art of record).

Waytena, relied on by Petitioner, was already considered by the Examiner during prosecution. *See* EX1002, pp.20-24, 69-74.

The teachings of Sim (WO97/18534) (EX1005) and Doi were present in other references that were considered and rejected during the original prosecution of the '983 patent. Gonsalves Decl., ¶¶86-88.

First, with respect to an Access Token to gain admission to an attraction based on a reservation: Sim provides a prompter, a communication device able to interact with a remote computer and display a sequence of reservations. Doi provides a customer navigation terminal able to interact with a remote computer and is able to make a reservation. Gonsalves Decl., ¶¶87-88.

These are cumulative to: Waytena providing a personal communication device (PCD), likewise able to interact with a one or more remote computers and display a sequence of reservations; and Mahoney providing a machine-readable identification card or device, able to activate a terminal having communication with one or more remote computers, the terminal able to display a sequence of reservations. *Id.*

Second, with respect to Party Information representing attributes, privileges, preferences of a party: Sim collects and uses at least the height and health characteristics of party members, which are stored in controlling computer 3. Doi collects and uses height and age with nickname memory 11. *Id.*

These are cumulative to: Waytena collecting and using height, age, weight, gender, health, and attraction preferences with screen 519; Kanemitsu collecting

and using attraction preferences, desired purpose, and a party's externally supplied reservations, *e.g.*, at steps S300 and S301; and Laval collecting and using a privilege of a party with the first validator 32. *Id.*

Third, with respect to Attraction Data that can distinguish between some attractions based on party information, assist in schedule and route planning, and/or facilitate management of the attraction: Sim provides age, size, and health restrictions; and Doi provides age and height restrictions, historic utilization by age, and current wait times. *Id.*

These are cumulative to: Waytena providing attraction information storage 213 containing age, height, and weight restrictions, location, operating conditions, and flags 264 having other information useful in scheduling (*e.g.*, categories), and physical queue monitor 103 to provide queue size and current actual throughput; and Kanemitsu providing database 14 with attractions categorized, their location, usable purpose, and recommended times by purpose. *Id.*

Fourth, with respect to Filtering Attractions based on a match between Attraction Data and Party Information for presentation to a party as recommendations: Sim does not recite filtering attractions offered to a party at the user selection display of FIG. 6, nor when a prompter for a single-ride is acquired

from a corresponding dispenser²; and Doi filters attractions offered to a party based on a party member's age matching attraction restrictions and historic utilization by similarly aged customers. *Id.*

These are cumulative to: Waytena filtering attractions offered to a party based on proximity to the party's location or matching a preference (*e.g.*, "kiddie rides") before presentation in attraction list 541; Kanemitsu filtering attractions offered to a party by the party's preferred categories of attraction (the screen in FIG. 4B), including preferred categories for facilities designated as apropos to a particular purpose, such as a "Date Spot" (the screen in FIG. 4A); and Mahoney filtering attractions offered to a party based on their preferred categories obtained from menu option icons 44, 46, 48 which result in a menu of corresponding attractions being listed on display screen 56. *Id.*

Fifth, with respect to Picking Attractions by a party from the recommendations presented to a party for reservations: Sim requires a party to pick attractions, as "queues to be joined," Sim 15:24, from an unfiltered list presented at an information kiosk 9 on a user selection display (FIG. 6) and

² Sim's "system will only allow access to correctly registered users if all users have prompters... If groups share a prompter it either allows access to the whole party and attendants ensure the ride restriction rules are met, or only the number of places corresponding to eligible members of the party are allowed access." Sim, 34:5-11.

further solicits the party's preferred sequence and preferred times³ for those attractions; Doi requires a party to pick an attraction, or decline, in response to a real-time recommendation, *e.g.*, for an attraction where the queue is short or a show that is starting soon. Gonsalves Decl., ¶¶87-88.

These are cumulative to: Waytena requiring a party to pick attractions to make reservations on their PCD (screens in FIGs. 5B-5E), including specification of a preferred time (which defaults to “now”) for each, and subsequent confirmation of reservation times proposed by the request processor 209; Kanemitsu requiring a party to pick attractions from the list of recommended attractions (steps S200, S300), and specify a purpose for their visit (step S301, unless already known at step S201 from the preferences used for the recommendations), such that a suitable range of recommended times can be inferred from entries in database 14 for each selected attraction; Mahoney requiring a party to insert their ID card 52 into a card satellite terminal 22 (a computer access terminal 42 of FIG. 4), pick attractions from those recommended, be advised of available time slots, and further pick from those; and Laval requiring a party to present a park admission ticket at a first verifier 32

³ Specification of preferred times necessarily implies a preferred sequence, though a preferred sequence does not necessarily imply preferred times.

corresponding to an attraction 22 to receive a reservation for the time currently advertised on second queue time display 35. Gonsalves Decl., ¶¶87-88.

Sixth, with respect to an Itinerary constructed in response to the attractions picked and any sequence or times preferred: Sim provides a queue manager running on central computer 3 that “includes a means of calculating the actual time and sequence of attendance at queue entrances [*i.e.*, attractions] offered to the user” which “can be in response to user preferences [*i.e.*, times and sequence], on the overall demand in the system and any priority attached to the particular user⁴ and would result in effectively, a recommended route,” Sim, 34:23-28, as it “optimizes the position of a person or group of people in each of the queue sequences to allow the person or group of people to join each queue and attend each event being queued for,” Sim, 8:28-32; Doi does not provide an itinerary corresponding to multiple reservations, but has a navigation planner 42 able to generate and present customer navigation information to a positional information (*i.e.*, attraction location) based on historic crowd conditions. Doi, 9:33-42. *See also* Gonsalves Decl., ¶¶87-88.

These are cumulative to: Waytena providing an itinerary in local reservation storage 206 and presented on the PCD screen as current reservations

⁴ Sim presents a scenario in which late-arriving parties accrue a priority that grants them shorter waits in the virtual queue, so that they may obtain as many rides as parties having spent the whole day at the park. *See* Sim, 24:7-20.

list 545, which includes consideration for conflicts among the reservation times and accommodation of travel time between attractions; Kanemitsu providing an itinerary as the travel plan shown in steps S107/S314, for which the plan making unit 12 calculates an optimum traveling route on the basis of the entered place of departure, visiting facilities, and place of return” and on the further basis of “map information and road traffic history information in the database 14... [and] the recommended visiting time” at steps S104/S305/S307; Libby providing with route planning engine 102/302 a target sequence list 108 which is presented to a route utilization system 72; and both Mahoney and Laval, providing an itinerary for which the times and sequence were determined as the party was picking the attraction. Gonsalves Decl., ¶¶87-88.

C. Prosecution of the '983 Patent

The patent application which issued as the '983 Patent was filed pro se by inventors Redmann and Eaton on May 15, 2001. Applicant filed Preliminary Amendments on December 1, 2004 and September 9, 2005. *See* EX1002, pp.347-352.

The Examiner issued the first office action on October 27, 2005, rejected claims 4-169 under 35 U.S.C 112, stating that “taken as a whole the claims recite an undue multiplicity of claims.” *Id.*, 192-195. Applicant filed a Request for

Reconsiderations on January 27, 2006, selecting twenty-five claims, including the claims that became independent claims 1–3 of the '983 patent. *Id.*, 133-191.

The examiner issued a Final Rejection on April 28, 2006, rejecting several claims as indefinite and rejecting others as being anticipated by Waytena or obvious over Waytena in view of Laval (6,173,209), Lancos (6,873,260), or Murashita (2002/0062236). *Id.*, 64-73. The Examiner stated that Claim 11 (issued Claim 2) would be allowable if rewritten in independent form. *Id.*

The Examiner commented that,

Waytena et al ('770) further discloses the aversion attribute (age), see column 7, lines 9-31, but doesn't specifically disclose a nullifying preference of said party, wherein said data distinguishes a portion of said first set of attractions as being less desirable with respect to said aversion attribute unless said corresponding nullifying preference is present and wherein in step d) at least on attraction from said portion of said first set of attractions is selected for said second set of attractions.

Applicant filed a request for continued examination on July 28, 2006, amending claim 11 into independent form and providing arguments against the Examiner's rejection regarding other claims. EX1002, pp.29-62.

The Examiner issued a third office action on November 1, 2006. *Id.*, 17-25.

The Examiner commented:

Applicant's reply of 7-28-06 has been considered, but is not convincing. Applicant argues that Waytena et al ('770) doesn't have "software operable to select" but has only a manual step of selection. The examiner disagrees, Waytena et al ('770) at column 14, lines 13-35 discloses that if desired, the patron may be presented with a list of attractions that match preferences, which is seen to meet the language of applicant's selecting step.

On November 9, 2006, Applicant had a telephone interview with the Examiner during which authorization was given for an examiner's amendment regarding certain "selection" limitations. The application was allowed after the amendment. *Id.*, 5-16. The Examiner provided the following reasons for allowance:

As per Claim 4.

Waytena et al ('770) doesn't specifically disclose computer having access to said data and said information, said computer having software that selects said second set of attractions from said first set of attractions, said second set of attractions consisting of at least some of said first set of attractions for which said data substantially matches with said information whereby said itinerary is customized for said party.

As per Claim 11.

Waytena et al ('770) further discloses the aversion attribute (age), see column 7, lines 9-31, but doesn't specifically disclose a nullifying preference of said party, wherein said data distinguishes a portion of said first set of attractions as being less desirable with respect to said aversion

attribute unless said corresponding nullifying preference is present and wherein in step d) at least one attraction from said portion of said first set of attractions is selected for said second set of attractions.

As per Claim 87.

Waytena et al ('770) doesn't specifically disclose computer having access to said data and said information, said computer having software that selects said second set of attractions from said first set of attractions, said second set of attractions consisting of at least some of said first set of attractions for which said data substantially matches with said information whereby said itinerary is customized for said party.

Years after the issuance of the '983 Patent, Disney filed its own United States Patent Application No. 12/036,176, titled "Method, System and Computer Program Product for Providing Real-Time Recommendations" ("the '176 Application").

The '176 Application concerns a method that includes accessing an itinerary corresponding to a guest of a venue, the venue having a plurality of attractions. The itinerary was created in response to one or both preferences of the guest and historical data about the venue. The real-time recommendation includes one or more suggested future activities for the guest. The one or more suggested future activities are communicated to the guest via a user device.

The Examiner rejected all the pending claims in the '176 Application under 35 U.S.C. § 103 as being unpatentable over the '983 Patent in view of various other references.

After a response and amendment by the applicant, the Examiner issued a Final Rejection, again rejecting all pending claims as being unpatentable over the '983 Patent in view of various other references. *See Canora et al.*, Final Rejection (EX2003).

On appeal, the PTAB affirmed the examiner's rejection of all the pending claims in the Disney '176 Patent Application over the '983 Patent in view of other references. *See Canora et al.*, Appeal Rejection (EX2004).

IV. Claim Construction

All terms that are not construed have their plain and ordinary meaning. *See* 37 C.F.R. § 42.100(b). When construing claims, the Federal Circuit “considers the prosecution history to determine whether the applicant clearly and unambiguously disclaimed or disavowed any interpretation during prosecution in order to obtain claim allowance.” *3M Innovative Props. Co. v. Avery Dennison Corp.*, 350 F.3d 1365, 1371 (Fed. Cir. 2003) (internal quotations and alterations omitted).

Each of independent claims 1 and 3 recites “said computer having *software that selects* said second set of attractions from said first set of attractions,” which

excludes manual selection of attractions to include in an itinerary (emphasis added). Gonsalves Decl., ¶¶90-93; *see also supra* Section III.

Each of dependent claims 20 and 22 recites “directed demand,” which means “the number of visitors directed to an attraction by the itineraries produced by this invention.” EX1001, 8:6-8.

V. The Claims of the '983 Patent Are Valid

A. Ground 1: Sim in View of Doi

1. Independent Claim 1

Sim in view of Doi does not render claim 1 obvious. Gonsalves Decl., ¶¶172-184.

Neither Sim nor Doi discloses or renders obvious “software that selects.” Gonsalves Decl., ¶173. Users’ manual selection of attractions to be included in an itinerary is a common limitation in the prior art related to itinerary provision. Gonsalves Decl., ¶175. This was identified by the Applicant in the original application, by the Examiner during prosecution, and by the Petitioner here. *Id.* Both Sim and Doi demonstrate this same limitation.

In the original application, Applicants cited Mahoney as “providing computer terminals for visitors having an ID to make and edit reservations. Turnstiles are equipped with ID readers and so can admit or deny admission to the

visitor based on having a timely reservation on the attraction.” EX1001, 3:3-7⁵.

Applicants cited Kanemitsu as describing “a system which allows selection from a list of destinations, such as a particular museum or a specific beach.” *Id.*, 4:62-64. During the prosecution, the Examiner cited Waytena, though users’ manual selection of attractions is apparent elsewhere therein, *e.g.*, “patron requests 302 a reservation for a selected attraction” Waytena, 12:25-26. However, claims 1 and 3 were narrowed to disclaim users’ manual selection of attractions. Gonsalves Decl., ¶92. In particular, the instances of the claim limitation “operable to select” in claims 4 and 87 were replaced with the claim limitation “that selects” such that the resulting claim required the attractions to be selected by software on a computer. EX1002, pp.9-10. The application was allowed after the amendment. *Id.* Thus, the ‘983 patent clearly and unambiguously disclaimed or disavowed an interpretation of the claims encompassing manual selection of attractions to include in an itinerary. Gonsalves Decl., ¶92.

Petitioner asserts that “Sim *alone* renders obvious claim 1[c].” Petition, p.17 (citing Houh Decl., ¶¶67-76, emphasis added). However, Sim consistently teaches “the user will be required to enter manually the required rides” to register

⁵ See Mahoney at Abstract; 2:28-32 (the “patron can select various choices” and “patrons that have the access card are able to select access times for various attractions, and are able to confirm at any time existing selections, . . . change previous selections.”)

for attraction queues⁶. Sim, 17:22-27. It is a mischaracterization to suggest Sim teaches *software selection*. Gonsalves Decl., ¶177.

For example, Dr. Houh asserts that “Sim also discloses that the system will re-allocate every user’s sequence when ‘[t]he theme park is lightly loaded and certain rides are to be closed down,’ or ‘[i]f ride failure occurs.’” Houh Decl., ¶68. Dr. Houh then concludes that “[w]hen re-allocating every user’s *sequence*, the controlling computer will select *different attractions* than what the user chose, such as by adding or removing an attraction.” *Id.* (emphases added). For the first scenario, “the theme park is lightly loaded and certain rides are to be closed down,” the queued users should be divided into two parts: early queued users, *i.e.*, normal users, and late queued users. The late queued users “may not physically be able to get from one ride to another in time without some re-arrangement of

⁶ See, e.g., Sim, 7:18-19 (“input means to allow the person . . . to select which queue they wish to join”), 8:22-24 (“allows . . . people to select a preferred sequence of queues to be joined”), 4:21-30 (“automatic registration gate corresponding to a respective queue . . . to add detected identification codes to the back of the respective queue”), 7:31-32 (“a person can remotely register for a plurality of queues”), 9:25-26 (“when a user registers for a queue sequence . . .”), 17:22-27 (“Registration for queues by users can be received either automatically by the removal of a prompter from a dispenser for a single ride or for multiple rides the user will be required to enter manually the required rides and ride sequence . . . as show in Figure 6.”), 32:1-5 (“Having obtained his or her prompter, the guest enters his or her ride and time preferences by means of docking stations 8 at the park entry points or at information kiosks throughout the park.”), 32:9-11 (“The user may, in addition, join any particular virtual queue by simply walking through the corresponding automatic registration gate.”)

queues, even though slots are available.” Sim, 24:7-11. If late queued users join the line for the first event at its end, they will be unable to attend the second event on time. Gonsalves Decl., ¶179. Thus, they need to cut in line for the first event. *Id.* As a result, Sim’s virtual queue for that event can be accelerated so all users having selected that attraction will have their access, though some earlier than originally planned and, for some of those users, this means their *sequence* of attractions may get changed. *Id.* There is no basis in Sim for positing that the controlling computer would *add* attractions. *Id.*

Another re-allocation of sequence is “[i]f ride failure occurs it may be fairer to reallocate all the queues.” Gonsalves Decl., ¶178. Sim does not mention the controlling computer will select different *attractions* than what the user chose. *Id.* Therefore, Dr. Houh’s assertion is unsupported by Sim.

Doi also teaches users’ manual selection of attractions. Gonsalves Decl., ¶181. Petitioner asserts that “[Doi’s] navigation planner 42 makes a plan to recommend other attractions,” which Petitioner characterizes as “selecting.” Petition, p.20. However, Doi discloses that customer confirmation is needed before the system navigates the user to other attractions. *See* Doi, 9:63-10:11 (“the customer a is allowed to decide . . . whether to move to the attraction D in accordance with the navigation.”), 10:12-19 (“invitations are given.”), 10:20-33 (“If the customer b . . . gives a consent to reserving seats . . . then a corresponding

number of seats are reserved, enabling a navigation from a current position to an attraction center[.]”), 10:38-44 (“[G]uiding a non-crowded attraction to the customer, by informing an attraction and taking a reservation[.]”).

Second, Sim in view of Doi does not render claim 1 obvious since neither of them discloses or renders obvious “said data substantially matches with said information.” Gonsalves Decl., ¶173.

Sim provides an example of the users selecting multiple attractions: “for multiple queues, the queue manager optimises the position of a person or group of people in each of the queue sequences to allow the person or group of people to *join each queue and attend each event being queue for.*” Sim, 8:28-33 (emphasis added). The users need to select exactly which attractions and at what time they want to attend, and the system will provide recommendations about when to physically join the queue for the selected attractions. Sim, 10:4-21. The users will be denied access to the selected attractions if they have “arrived either before or after the time, is at the wrong ride or the user is at the wrong ride and at the wrong time.” Sim, 19:28-20:22.

Petitioner asserts that “Doi’s system collects use data reflecting use frequencies of attractions by customer ages and attraction waiting times”; the customer terminal can “apply this use data to select attractions for the customer based on their information matching attraction data.” Petition, pp.19-20.

Petitioner then provides examples of attractions being selected that match the user information. *See* Petition, p.20. In a footnote, Petitioner asserts that “[t]here can be no question that Doi discloses a ‘substantial match’ as claimed, irrespective of the precise boundaries of that term, as Doi discloses that there is an actual match between attraction data and party information[.]” Petition, p.20, n.8. This assertion is not true. Doi discloses only an exact match—not a substantial match that eases the requirement for a match. Gonsalves Decl., ¶185. For example, in Doi, an age of the customer stores in the use data memory: “the customer navigation can be varied in dependence on the age as well as on the crowd condition.” Doi, 9:52-62. A second attraction is recommended, *i.e.*, “invitations are given,” if “selected matching ages to attraction from ages of customer stored in use data memories.” Doi, 10:12-33. In another words, if the ages of customers do not match exactly the attraction data (*i.e.*, the customer’s age falls outside the enjoyable age range for the attraction), a recommendation will not be made. Gonsalves Decl., ¶185.

The ’983 Patent, in contrast, discloses that the computation to generate a customized itinerary may involve a utility function. EX1001, 27:60-28:45. The utility function will be empirically determined; the greater the value returned by the function, the more desirable the event that was evaluated. *Id.*, 28:6-16. The ’983 Patent provides an example—the one-to-ten scale:

A result of ten represents an attraction that makes the best possible (or best available) match to a party's profile, just a few steps away. A result of one represents the least alluring attraction that is not closed or forbidden, at the furthest node in the facility, and having to wait when you get there, and having the largest excess demand so as to have required a large negative perturbation to discourage that excess demand. If the one-to-ten scale is used, a result of zero is appropriate to attractions that are not open or are otherwise forbidden (*e.g.*, an attraction requiring a special admission that the party does not possess.)

Id., 28:31-42.

The '983 Patent further discloses that when the computer generates a customized itinerary, a potential event is selected for evaluation by the utility function. *Id.*, 28:43-55. Once the utility function is run for the potential event, the result is entered into a desirability field. *Id.* If the desirability field of the potential event is greater than the same field in the current event, the potential event is selected. *Id.*

The '983 Patent further discloses:

[T]he entire collection of attractions can be ranked for each party by virtue of the ratings each attraction receives for the factors in the party's profile.

...

Attractions are selected to give preference to those receiving a higher rating. Attractions in lower ranks are generally less likely to be included. Attractions in the lowest rank would not ever be included, as these certainly violate some clearly stated preferences or limitations in the profile.

Id., 6:49-7:42.

As discussed above, Sim’s systems “allow the person or group of people to join each queue and attend each event being queue for,” Sim, 8:28-33, which means the user chooses which event to join. Similarly, Doi discloses that the customer must decide which attraction to move to. Gonsalves Decl., ¶185. Thus, only an exact match is disclosed, as users either select the attraction or not; there is no teaching of anything less than an exact match. *Id.* In contrast, the ’983 Patent discloses software that selects attractions for users. *Id.* The selection may not exactly match the users’ preferences; however, the software determines “the best possible (or best available) match to a party’s profile.” *Id.* (citing EX1001, 28:31-42).

The distinction is also emphasized in the last clause of claim 1. Gonsalves Decl., ¶185. Instead of reciting “customized *by* said party,” claim 1 teaches “whereby said itinerary is customized *for* said party.” “Customized for” indicates that the software makes the selection of the itinerary for the party, whereas “customized by” requires that the selection is done by the party. *Id.*

Thus, Sim and Doi fail to teach or suggest “software that selects” and “said data substantially matches with said information.”

2. Independent Claim 3

Petitioner asserts that “Claims 3[pre]-3[e] are near identical to claims 1[pre]-1[e].” Accordingly, the rebuttal above for claim 1 also applies to claim 3. Gonsalves Decl., ¶186.

3. Dependent Claim 5

Claim 5 discloses that the information about the party comprises an attribute that distinguishes a portion of the attractions as being more desirable. The attribute is used by the software in step d) while selecting the second set of attractions.

Petitioner intentionally avoid an in-depth discussion of claim 5 and simply asserts that “[claim 5] merely specifies a type of party ‘information’ to use,” and that “Sim in view of Doi renders claim 5 obvious.” Petition, p.24. However, Sim states “[t]he system would request other relevant information such as height or health status, which may be relevant in *allowing access to certain rides* and information such as the need for a stroller or wheelchair.” Sim, 22:32-23:3 (emphasis added). Sim discloses such attributes may affect individual party

members at the point of access; it does not use party attributes to select attractions for the customized itinerary, as that remains the domain of the patron. Gonsalves Decl., ¶188.

Doi discloses “memory 11 is adapted . . . to memorize the customer’s . . . parameters, such as the height and age, that do not invade the person’s privacy, but are necessary for use, such as of an attraction.” Doi, 5:21-25. The parameters stored in the memory “can be referred to for a decision as to whether the user meets a preset limitation of use.” Doi, 6:43-56. However, this use of the attribute is for customer guide server which are “installed at such particular points as attractions,” and not in the selection of attractions for a customized itinerary. Doi, 50:30-56. Elsewhere, Doi discloses that customer confirmation is needed *before* its system navigates the user to other attractions. *See* Doi, 9:63-10:11 (“the customer a is allowed to decide . . . whether to move to the attraction D in accordance with the navigation.”), 10:12-19 (“invitations are given.”), 10:20-33 (“If the customer b . . . gives a consent to reserving seats . . . then a corresponding number of seats are reserved, enabling a navigation from a current position to an attraction center[.]”), 10:38-44 (“[G]uiding a non-crowded attraction to the customer, by informing an attraction and taking a reservation[.]”).

Both Sim and Doi disclose using the attribute to manage customer’s access permission, and Doi further discloses using the attribute to make

recommendations. However, neither discloses the attribute is used by software while selecting the attractions for a customized itinerary.

4. Dependent Claim 7

Claim 7 discloses that the information about the party comprises a privilege that distinguishes a portion of the attractions as being more desirable. The attribute is used by the software in step d) while selecting the second set of attractions.

Sim discloses a system that “can be employed in theme parks as a queue management system for all of the guests, or for a proportion of the guests who are willing to pay a premium, or one of a range of premiums corresponding to a range of privileges.” Sim, 3:23-27. Sim fails to specify any “privilege” beyond who can use it. Gonsalves Decl., ¶192. Sim later discloses the system “can allow different classes of guest depending on the fee paid.” Sim, 37:3-4. The privilege disclosed is similarly nonspecific. Gonsalves Decl., ¶192.

Sim continues: “[w]here there are fees associated with one or more queues, . . . [t]he payment means is adapted to request payment and await receipt of payment before registering a person . . . for a desired queue which has a fee associated therewith.” Sim, 12:35-13:8. This indicates to a Person of Ordinary

Skill in the Art (“PHOSITA”) that a user, rather than software, actively executes a purchase to be admitted to Sim’s virtual queue. Gonsalves Decl., ¶193.

Petitioner argues that Sim disclosed the privilege since Sim discloses “[t]he queue manager includes means of calculating actual time and sequence of attendance at queue entrances offered to the user. This calculation can be in response to user preferences⁷ on the overall demand in the system and any priority attached to the particular user and would result in effectively, a recommended route.” Sim, 34:22-32. Here, as disclosed in ’983 Patent⁸, no attraction is shown to be distinguished “as being more desirable with respect to said privilege” and “selected for” the itinerary as recited in claim 7.

Sim discloses “controlling computer 3 can operate . . . [to] ensure that a user registering late in the day would be given access to the same number of queues as a user registering earlier in the day. Such a user could join certain queues near the front.” Sim, 23:22-27. A PHOSITA would understand from Sim’s disclosure—where everyone receives the same number of queues and no pricing

⁷ Sim’s “user preferences” refers to rides selected, preferred sequence of rides, or preferred ride times. *See* Sim, 15:23-24 (“Figure 6 illustrates the display which will allow the user to select the queues to be joined.”), 17:25-26 (“[T]he user will be required to enter manually the required rides and ride sequence.”), 22:29-32 (“The park visitor . . . would use terminals . . . at information kiosks . . . to enter ride and time preferences.”)

⁸ ’983 Patent discloses the route optimization process and various route-planning systems, as “Prior Art Relating to Itinerary Generation” in the specification.

is specified—that being able to join at the front (rather than the end) of a queue constitutes a form of priority access. Gonsalves Decl., ¶195. However, this priority does not impact the selection of attractions, as required by claim 7; it solely influences the recommended route to a selected attraction. *Id.*

5. Dependent Claim 8

Claim 8 requires the data about the attraction to comprise a schedule time, *e.g.*, “discretely scheduled times, such as theaters with specific show times.” EX1001, 9:12-13. For some attractions, the schedule time can vary by location, *e.g.*, the arrival time of a parade along a parade route. *Id.*, 47-56. Petitioner does not explain how the displayed times in FIG. 3 of “Space Mt” and “Haunts Hs,” are the scheduled times. Gonsalves Decl., ¶197. Actually, “Space Mt” and “Haunts Hs” are attractions that continuously accept riders, rather than events scheduled to start at a specific time. *Id.* The displayed times are the next available times, which will change based on factors such as the length of the queue and other considerations. *Id.*

6. Dependent Claim 10

Claim 10 discloses “said second scheduled time is at least equal to said first scheduled time plus a *time required* between attractions.” Petitioner asserts that

Sim's system discloses "time required between attractions" because it "takes into account that parties must 'physically be able to get from one ride to another in time.'" Petition, p.28 (citing Sim, 24:7-11). Sim discloses a scenario in which "[t]he theme park is lightly loaded and certain rides are going to be closed down"; therefore, late users may not physically be able to get from one ride to another in time." Sim, 24:5-8. Sim's solution is "some re-arrangement of queues" when "slots are available." Sim, 24:10-11. A PHOSITA would understand "physically be able to get from one ride to another in time" refers to the minimum time between the two attractions. Gonsalves Decl., ¶200. Petitioner offered no evidence that Sim's system understands the relative positions of the attractions between them, which is critical in the '983 Patent. *See* EX1001, 10:16-24 (FIG. 8 is a map of an exemplary facility idealized as nodes and links suitable for designing routes; FIG. 9 illustrates a link database representing the exemplary facility map of FIG. 8; FIG. 10 illustrates an attraction database representing attractions at exemplary facility of the map of FIG. 8; FIG. 11 shows a node list database representing aggregations of nodes at which the associated attraction can be experienced). The '983 Patent also discloses when the software selects attractions for a customized itinerary, it recognizes that slow groups have different speeds compared to fast groups and travel times vary on light and heavy

attendance days. *Id.*, 17:46-18:4. Thus, A PHOSITA would not conclude that Sim teaches “time required between attractions.” Gonsalves Decl., ¶200.

7. Dependent Claim 11

Claim 11 further discloses a third set of attractions “consisting of an already visited portion and a remaining portion.” Petitioner mischaracterizes claim 11, saying it only “specifies that the selected set of attractions is an adjustment to a previous itinerary due to an ‘interruption.’” Petition, p.28. Petitioner ignores the critical limitation “second set of attractions substantially *excludes* said already visited portion.”

As an example of the interruption, Petitioner cites rides experiencing “abnormally long wait times” due to overcrowding. Petition, p.28. Doi explained that if Attraction A is crowded, a recommendation for Attraction D is given. However, there is no exclusion of an already visited portion: Attraction D can be an attraction that the customer already visited. Sim suffers similar deficiency. As Petitioner asserts Sim discloses re-allocation of user’s sequence for the same attraction rather than selected difference attraction. *See supra*, Gound 1, Claim 1. Sim also does not disclose exclusion of an already visited rides.

In addition to the lack of software that selects the second set of attractions, there is no evidence that Doi’s list of visited attractions is used as a basis for Doi’s

recommendations and critically, excluding attractions from this list since they were previously visited, required in Claim 11. Gonsalves Decl., ¶204.

8. Dependent Claim 17

Claim 17 further discloses the “itinerary is announced audibly.” Petitioner asserts Sim in view of Doi renders claim 17 obvious because Sim’s portable units “can be provided without an alphanumeric display with a simpler ride indication arrangement.” Petition, p.33. The Examiner made the same argument with respect to Waytena. *See* EX1002, p.70. However, the “simpler ride indication” (even in the form of a voice message) is not the same as “the next event indicated on the itinerary. . . might instead be announced audibly,” EX1001, 30:65-67, and does not correspond to claim 17’s requirement that “at least a portion of said itinerary is announced audibly by said presentation means.” Gonsalves Decl., ¶209.

9. Dependent Claim 19

Claim 19 requires that the data about a first attraction that has excessive demand causes the software to be less likely to select the first attraction. Gonsalves Decl., ¶214.

Sim relies on users to select their attractions and allows collection of preferred sequences and/or ride times. *See supra*, Ground 1, Claim 1. The user

information is available to bias the “means of calculating the actual time and sequence of attendance,” and is consistent with Sim’s teaching that “[t]his calculation can be in response to user preferences, on the overall demand in the system and any priority attached to the particular user” Sim, 34:22-27.

Accordingly, since Sim’s patron has already selected the attractions, there is no plausible way that Sim’s queue manager makes their selection less likely.

Gonsalves Decl., ¶215. Similarly, in Doi, the likelihood of an attraction being selected cannot be higher or lower since Doi’s system only deals with attractions customers have already selected. Gonsalves Decl., ¶216.

Accordingly, since neither Sim or Doi alone or in combination can reduce the likelihood of an attraction having excessive demand being selected, they cannot render claim 19 obvious.

10. Dependent Claim 20

Tracking specifically the portion of the demand for an attraction that is produced by the claimed itinerary generation process can provide valuable feedback for the control of the itinerary generating process itself. This feedback is also relevant for other integrated reservation-making systems. For instance, if there is an allocated capacity for the first attraction and it is excluded from

selection based on the directed demand exceeding the allocated capacity. *See* EX1001, 8:28-31.

Petitioner asserts “Sim is tracking ‘directed demand,’ *e.g.*, the number of parties its system is directing to each attraction[,]” Petition, p.36. This is not the case, because Sim has no “directed demand.” Sim accepts the parties’ attraction selections and does not change their number. Given the patron demand, Sim does have an opportunity to manage it and shift it to different times, but the total demand remains unaltered.

11. Dependent Claim 22

Claim 22 further discloses “said software applies a perturbation.” Both Sim and Doi rely on users to select attractions. Gonsalves Decl., ¶ 222. Thus, there is no software to apply a perturbation to a desirability of a first attraction of the first set of attractions. The perturbation produces a different result for the selection of attractions from the first set of attractions, *i.e.*, the second set of attractions. *See* EX1001, 24:16-25:15 (discussing the perturbed directed demand in FIG. 13). Both Sim and Doi rely on other methods to manage their queues. Gonsalves Decl., ¶ 223. Sim can reorder where people are in a virtual queue; Doi uses more of a “carrot” approach by adjusting the price of an attraction, which may coax

Doi's customer to decide the lower price is sufficiently attractive. *See* Petition, p.36.

No combination of these teachings results in a perturbation to desirability that would lead to a different software-based selection of attractions. Petitioner's assertion is unsupported by Sim in view of Doi.

12. Dependent Claim 23

Dr. Houh states that "Sim's controlling computer 3 enables the transmission of messages to the portable module 1." Houh Decl., ¶110. As mentioned in the patent, "[c]onveniently, the method of communication between the portable modules and the queue manager is by way of radio paging messages, which can be received and displayed by the portable modules." Sim, 3:28-31. Since all commands directed to Sim's portable module/prompter are considered messages, this forms the foundation of the communication technology in Sim. Gonsalves Decl., ¶226. However, as Dr. Houh admits, Sim teaches that transmission of such messages *disables presentation of the itinerary* in order to present the recommendation. Gonsalves Decl., ¶¶227-231.

Therefore, Sim fails to disclose at least two of the limitations recited in claim 23: first, said itinerary further comprising a second set of messages; second,

each of said second set of messages is provided to said party *in conjunction* with said itinerary.

13. Dependent Claim 24

Claim 24 further discloses “said software comprises a decision making routine.” As discussed above, neither Sim nor Doi discloses “substantially matches” or “software that selects.” They, therefore, cannot render obvious claim 24. Additionally, that Sim includes “algorithms” does not mean that its system teaches or comprises “decision-making routines.”

14. Dependent Claims

Additionally, all dependent claims (including those discussed above) are necessarily valid in light of Petitioner’s failure to prove claim 3 invalid. *In re Fine*, 837 F.2d 1071, 1076 (Fed. Cir. 1988) (“Dependent claims are nonobvious under 35 U.S.C.S. § 103 if the independent claims from which they depend are nonobvious.”); Manual of Patent Examining Procedure (MPEP) § 2143.03.

B. Ground 2: Sim (as Modified by Doi) in View of Waytena

Each of the below dependent claims is valid at least because they are based on valid independent claim 3. *See In re Fine*, 837 F.2d at 1071; MPEP § 2143.03.

1. Dependent Claim 4

Dr. Houh asserts “Sim in view of Doi teaches a system that recommends an itinerary of attractions and attraction times to a party.” Houh Decl., ¶117.

Petitioner frequently uses the phrases “ride preference requests” and “party preferences” as if they correspond to ’983 Patent’s notion of “preferences.”⁹

Gonsalves Decl., ¶234. Petitioner asserts that Sim’s “queue manager” is calculating “queue entrances [, *i.e.*, attraction choices,] offered to the party;” the choices so offered can be narrowed “in response to party preferences.” Petition, p.18. However, in Sim, these “preferences” refer to *attractions selected by the party*, possibly including a preferred sequence or time for individual attractions, which can influence the itinerary generation. *See* Sim, 7:15-19, 8:22-27, 15:23-34. Sim in view of Doi also discloses a system can *recommend* attractions, which a party may choose to adopt, and the party’s selections are fashioned into an itinerary. Gonsalves Decl., ¶234. Both Sim and Doi, whether alone or in combination, teach that the selection is made by the user.

Petitioner admits that “Waytena simply adds that additional party information, such as preferred ride types, can also be used to determine which rides to suggest to a party.” Petition, p.41. Dr. Houh states, “A POSITA would

⁹ Claim 4 of ’983 Patent reads: The method of claim 3 wherein said information comprises a preference of said party

have been motivated to include such preference information and recommended list of ‘matching’ attractions in the system of Sim . . . by *suggesting rides to parties* that they would enjoy but may not know about.” Houh Decl., ¶122 (emphasis added). Once Waytena’s or Sim’s customers have selected their attractions, reservations can be made. Thus, Sim (as Modified by Doi) in View of Waytena fails to disclose software that selects attractions, and consequently, cannot render claim 4 obvious.

2. Dependent Claim 18

Petitioner asserts that Waytena teaches that parties use its PCDs “to transmit reservation requests to the attraction computers. If the computer determines the attraction is unavailable, it responds that ‘the attraction is unavailable.’ If the attraction is unavailable, it will not be included or available for the party’s itinerary.” Petition, p.45. Note that a user wastes time and is disappointed by attempting at least one reservation request before being informed that the attraction is not available. Gonsalves Decl., ¶240; *see* Waytena Fig. 7 (manual request is received at 702, necessarily in advance of rejection at 722). Thus, a user must *attempt to reserve first* and then receive the unavailable notification. Gonsalves Decl., ¶240. In contrast, the ’983 Patent discloses that the software will determine attraction availability *before* the reservation is made. *Id.*

3. Dependent Claim 21

A PHOSITA would be baffled by Petitioner’s proposal to “include Waytena’s ‘reservation computer’ in Sim (as modified by Doi).” Gonsalves Decl., ¶242. First, Waytena does not mention a “reservation computer,” which is an element of ’983 Patent claim 21. Gonsalves Decl., ¶243. Second, Sim already achieves what Dr. Houh asserts is the motivation to add Waytena. Gonsalves Decl., ¶244. Dr. Houh asserts “Sim and Waytena are in the same field and disclose similar systems, and a POSITA would have been motivated to include Waytena’s attraction *computers* for making reservations in Sim to ensure that the *current operating status* and *crowd conditions* of each attraction are properly taken into account when reservations are requested.” Houh Decl., ¶132. However, these elements and functions of Waytena, alleged to motivate a PHOSITA to make the combination, are already present in Sim (in view of Doi) without any contribution from Waytena. Gonsalves Decl., ¶245. Sim has a host *computer 3*, under many names.¹⁰ *Id.* Sim ensures that *crowd conditions* are taken into account when reservations are made. Gonsalves Decl., ¶246. Sim ensures that *current operating status* is taken into account when reservations are made. Gonsalves Decl., ¶247.

¹⁰ See Sim, 28:13-14 (“host computer 3”); 14:35 (“controlling computer 3”); 15:10 (“central computer 3”).

C. Ground 3: Waytena alone

1. Independent Claim 1

Waytena does not render obvious claim 1. Gonsalves Decl., ¶¶95-125.

Waytena was already considered and rejected by the Examiner during prosecution. *See supra*, '983 Overview, B. Prosecution.

Citing Waytena's description of a personal communication device (PCD), Petitioner admits that "the PCDs will present a 'list of attractions that match the particular preferences of the members of the patron's group.' *Patrons can then make reservations* for those attractions using their PCDs, and the PCDs will display a list of schedule attractions along with the times to visit them." Petition, p.50 (emphasis added).

In Waytena's FIG. 5B, ATTRACTIONS list 541 contains three attractions: WATER FLUME, THE RAT, and TIME TRAVEL. Petition, p.57. Attractions previously selected by the user and then reserved are shown in the "list 545 of previously-made reservations" and appear under the heading CURRENT RESERVATIONS. Waytena, 14:18-19. Waytena teaches "A patron may request a reservation for a particular attraction as follows. The patron selects one of the attractions in list 541." Waytena, 14:36-37. A PHOSITA would see from FIG. 5B that one of the attractions in list 541, the third one, TIME TRAVEL, is highlighted by a rectangle, representing the user's current selection, Gonsalves Decl., ¶99:

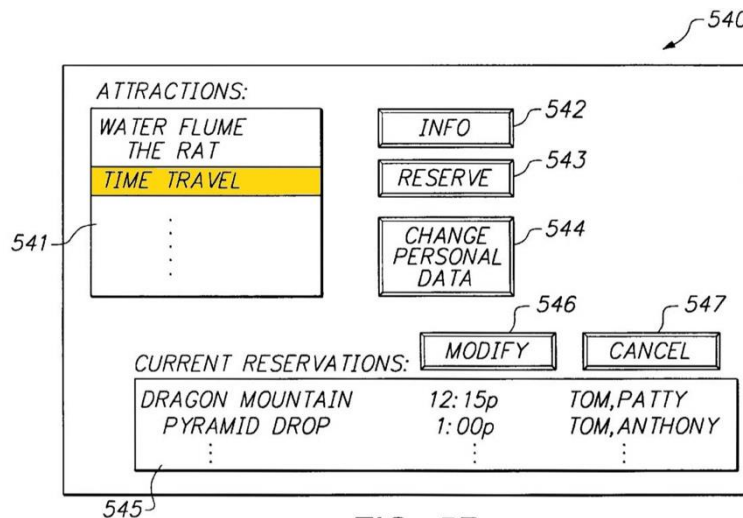


FIG. 5B

Waytena continues, “Clicking on button 543 causes PCD 102 to enter state 503 for requesting reservations. FIG. 5C shows a sample display screen 560 for requesting a reservation for a selected attraction.” Waytena, 14:41-44. From this, the PHOSITA would conclude that a press of the RESERVE button 543 in FIG. 5B would request a reservation for the currently selected TIME TRAVEL attraction, and indeed this is what is shown by FIG. 5C. *See Gonsalves Decl.*,

¶100:

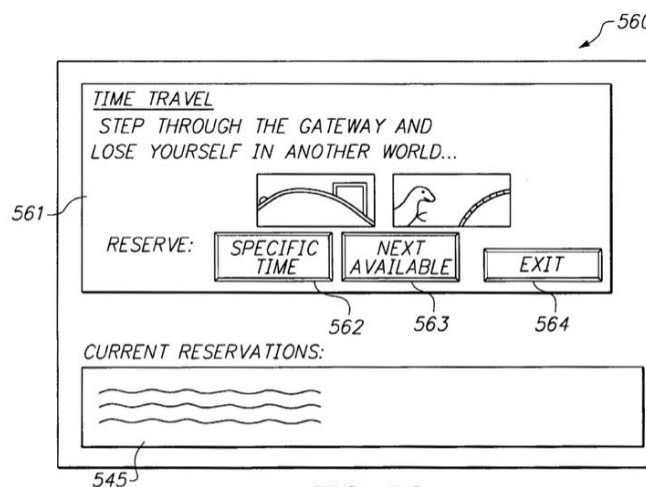


FIG. 5C

Upon observing Waytena's FIG. 5B, which displays the third attraction—TIME TRAVEL—in list 541 as currently selected, and subsequently in FIG. 5C, where it is considered as the subject of a reservation request, a PHOSITA would conclude that a user is neither required to make reservations for *every attraction* in list 541 (as users can select which ones), nor constrained to select and reserve attractions *in the sequence* shown in list 541. Gonsalves Decl., ¶101. This is consistent with Waytena's desire to address the "inability of patrons to communicate their intention to attend particular attractions, and in effect, request a reservation for an attraction" by "allow[ing] patrons to . . . make reservations for certain ones of these [attractions]." Waytena, 1:48-50, 2:31-35.

As part of the teaching, Waytena identifies latencies in communication protocols of the era as being "apparent to those skilled in the art," Waytena, 9:7-10, and expresses sensitivity to these and the interaction of variously specified timeout periods. *See* Waytena, 13:11-19, 17:10-13, 17:51-54, 17:59-65, 18:8-11, 20:65-21:3, 21:29-31, 21:35-40.

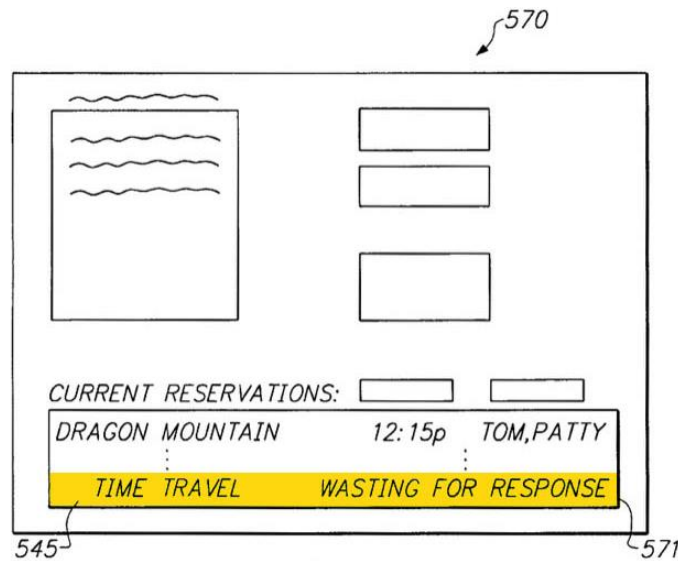


FIG. 5D

The resolution is illustrated in FIG. 5D, where reservations list 545 shows an entry for the TIME TRAVEL attraction listed with the message 571 “WA[I]TING FOR RESPONSE”, *i.e.*, “an indication that PCD 102 is waiting for a response regarding the request.” Waytena, 16:54-55.

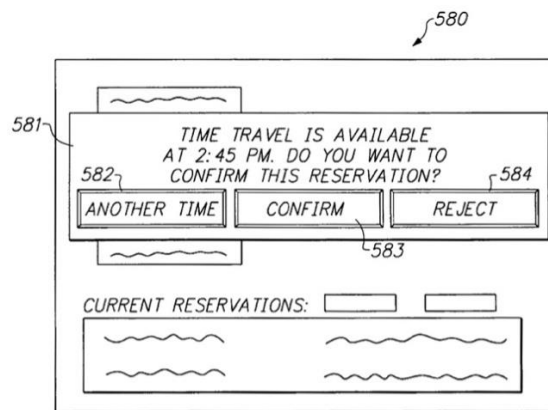


FIG. 5E

Whether the patron chose to request a specific reservation time using button 562 or opted for the next available reservation time with button 563¹¹ on screen

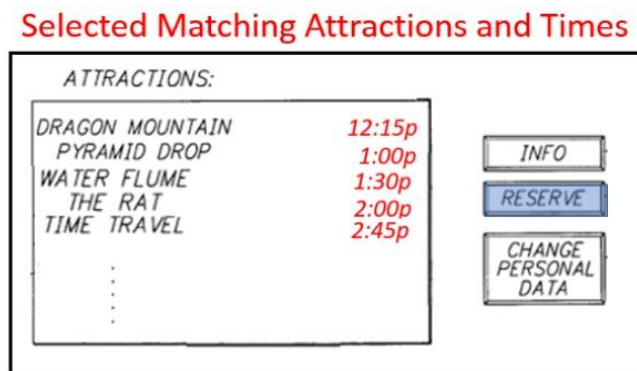
¹¹ Equivalent to requesting a reservation for the “current time.” *See* Waytena, 23:4-6.

560 of FIG. 5C, if the attraction computer provides a proposed reservation, the confirmation screen FIG. 5E is displayed. Gonsalves Decl., ¶104. If the proposed time works, the patron can confirm with button 583; on the other hand, if “Another Time” button 582 is pressed, “PCD 102 prompts patron to enter a new requested time.” Waytena 17:33-65.

Petitioner’s proposed reconfiguration of Waytena’s mechanisms to match their hypothetical user interface would not have been obvious to a PHOSITA at the time of the invention as claimed in the ’983 Patent. Gonsalves Decl., ¶¶105-108. A PHOSITA would not perceive this as achieving Waytena’s intended purpose, nor would it produce the same results as asserted by the Petitioner. *Id.* Based on Waytena’s teachings, it could not be expected to function as Dr. Houh contends.

Regarding claim element 1[c], Petitioner points to Waytena’s ability to filter the list of attractions, based on categories the user may have indicated. Gonsalves Decl., ¶106. Petitioner contends that Waytena’s filtering function, operating without user intervention, accomplishes the same result as if the user were manually selecting those attractions for an itinerary. *Id.* In essence, Petitioner and Dr. Houh are asserting the patron’s selection is completely superfluous to Waytena’s invention and performs no useful function. Gonsalves Decl., ¶107.

Petitioner and Dr. Houh proffer a hypothetical user interface (reproduced below), purportedly based on Waytena's FIG. 5B, in which, if true, entries in ATTRACTIONS list 541 have been augmented with proposed reservation times that a user is able reserve, *en masse*, using what had been RESERVE button 543, and Petitioner asserts that a "POSITA would have recognized Waytena could readily do this," Petition, p.56, and that a party "would get the same attractions at the same times with this approach as if they made individual selections and followed the process of Figures 5B-5E." Petition, p.57 (citing Houh Decl., ¶151).



However, this is not the case for the following reasons. Gonsalves Decl., ¶¶109-124.

First, Waytena discloses that the selection and order of attractions during reservation requests matter to the party. Gonsalves Decl., ¶110. Waytena intends to provide the "ability of patrons to communicate their intention to attend particular attractions" and "make reservations for certain ones of these" Waytena, 1:48-49, 2:35. Currently DRAGON MOUNTAIN, PYRAMID DROP, and TIME TRAVEL are the first three attractions displayed in FIG. 5D. If the users choose

to, they can select WATER FLUME as the third one, as shown in the above figure.

Thus, which attractions are selected, and the order of selection affects which reservations the party can get. Gonsalves Decl., ¶110.

Second, when requesting a reservation, which attractions are selected and the order in which they are selected *matters to the resulting schedule of reservations*. Gonsalves Decl., ¶111. When reservations are being made consecutively, they are being made at different times. *Id.* Waytena expects that the first attraction that a party selects for which they obtain a reservation occupies a block of time which subsequent reservation requests will not be able to violate. *Id.* Thus, the resulting schedule of reservations is based on the first attraction's schedule, which means resulting schedule of reservations is based on which attraction is selected as the first attraction and the order of the subsequent attractions. *Id.*

Third, Dr. Houh asserts that under Waytena, “a party can individually choose and reserve among computer selected (or recommended) attractions” and that this is an “easy one-step process that gives the party the *same* resulting schedule of reserved attractions.” Houh Decl., ¶149 (emphasis added). In the example of FIG. 5B, besides reservations shown in list 545, the patron selects the *third* attraction in list 541. Why the *third*? A PHOSITA is left with no rationale as to why a party might choose the *third* entry in a list instead of one or second

entries, which will then result in three different user-selected combinations. If the party is free to choose the attractions in list 541, and the proposed hypothetical user interface (along with the description of its operation) offers no mechanism or criteria for ordering—something recognized as significant to both the party and the resulting schedule—then it is absolutely not obvious that one can obtain identical results with and without selection by the party. Gonsalves Decl., ¶112.

Fourth, Petitioner’s hypothetical user interface would not be feasible to a PHOSITA. Gonsalves Decl., ¶114. Waytena is concerned with the protocol latencies and timeout durations that gave rise to the message 571 “WAITING FOR RESPONSE” in FIG. 5D. *Id.* A PHOSITA would be concerned that, instead of merely a repetition of the protocol latency and timeout issues, there would be an amplification of these issues in the hypothetical display situation. *Id.* In Waytena, each PCD 102 would, at most, assess and present one proposed reservation at a time; in the hypothetical display, each PCD would simultaneously evaluate a proposed reservation for every available attraction. Even though only five attractions are illustrated in Petitioner’s hypothetical interface, in reality, there would be many dozens, up to the total number of attractions in the theme park. Further, a PHOSITA would realize that the complexity is even greater. Gonsalves Decl., ¶114. Each PCD 102 presenting the hypothetical display is holding that number of proposed reservations, having seized a resource and

blocking other users from accessing those proposed reservations. *Id.* This, in turn, exacerbates timeout issues causing the persistent WAITING FOR RESPONSE status. *Id.*

Fifth, under Petitioner's proposed allocation scheme, Waytena's teachings regarding the probability of a party keeping a reservation are significantly altered by the modification, as the reservation is one that a party did not individually request. Gonsalves Decl., ¶115. A PHOSITA would doubt whether the overbooking calculations Waytena promotes would still be valid. *See id.*; Waytena, 7:34-38, 10:43-49; 20:51-64, 24:51-25:4. Users have a variable propensity to keep a reservation if they did not need to pick the reservation themselves. This could lead to numbers of reservations far higher than Waytena going unused, further complicated by the fact that the confirmation probability is radically altered. Gonsalves Decl., ¶115. Under the operation proposed by Dr. Houh, the itinerary is offered as an all-or-nothing option. *Id.*

Sixth, it would be apparent to a PHOSITA that, with a filter based on Waytena's four example attraction preferences (thrill rides, educational, shows, kiddie rides¹²), selecting any one of those preferences in isolation might return approximately one quarter of the attractions in a theme park. Gonsalves Decl., ¶116. If those categories were mutually exclusive, selecting any two categories

¹² *See* Waytena FIG. 5A, callout 522.

might combine to list half of the theme park's attractions. The availability of attractions and proposed reservations could be so numerous as to exceed the number of attractions a patron could visit in a day. In such a case, the concern over which attractions to select and the order in which they are chosen becomes even more significant, causing the PHOSITA to further doubt the viability of the Petitioner's hypothetical interface and its underlying mechanisms. *Id.* Clearly, when attractions need to be dropped from consideration due to time constraints, patrons will make careful choices. *Id.* These choices are not reproducible by the mechanisms proposed by Waytena and recombined in the manner suggested by Dr. Houh. *Id.*

Seventh, Petitioner's hypothetical modification is a *modern* construction motivated by hindsight; it does not exist in the prior art, and is not obvious from the prior art. It presents a simple picture that was not achievable by Waytena. Gonsalves Decl., ¶117. Waytena teaches that, from the initiation of a reservation transaction by pressing the "RESERVE" button 543 on FIG. 5B, a proposed reservation time is unavailable for display in FIG. 5C with the "NEXT AVAILABLE" button 563. *Id.* It is also not visible as a current reservation in list 545 of FIG. 5D and remains unavailable until the presentation of a proposed reserved time becomes possible in FIG. 5E as message 581, at which point it is presented for acceptance by the patron. *Id.* Waytena discloses this is because of

“known buffering and handshaking protocols” and other patrons being “given a fixed period of time in which to confirm or reject the reservation.” Waytena, 9:8-9, 13:2-3. During this process, “reservation times may be ‘overbooked’ by attraction computer 101 to the extent permitted by the determined probabilities of confirmation for the patrons requesting the attraction.” Waytena, 20:57-60. As a result, “PCD 102 then awaits an acknowledgment from attraction computer 101 indicating that the request is being processed and displays a message to inform the patron that a response is being processed.” Waytena, 16:45-48. Then “[list] 545 now includes item 571 showing the reservation request with an indication that PCD 102 is waiting for a response regarding the request.” *Id.*

Eighth, Petitioner’s hypothetical interface shown in “Waytena, Fig. 5B (as modified and annotated)” did not exist in Waytena; rather, it exists in the ’983 Patent as FIG. 4, shown here, next to Waytena:

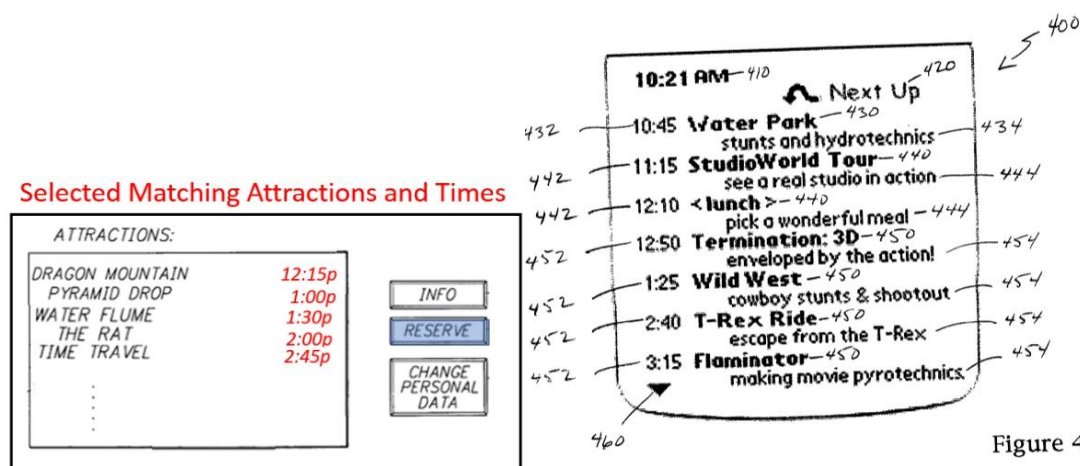


Figure 4

Where '983 shows “Next Up” indicator 420, Petitioner adopts Waytena’s “ATTRACTION:” symbol. In both the '983 Patent itinerary 400 and Petitioner’s

hypothetical interface, attraction names are paired with scheduled times.

Petitioner has mimicked itinerary 400 of the '983 Patent FIG. 4 even to the extent of omitting other buttons and lists from Waytena's original FIG. 5B. Gonsalves Decl., ¶121. The resulting interface leads to a problem disclosed by Waytena: "the inability of patrons to communicate their intention to attend particular attractions." Waytena, 1:48-49.

Despite Dr. Houh's assertion that "a party can individually choose and reserve among computer-selected (or recommended) attractions" as "an easy one-step process that gives the party the same resulting schedule of reserved attractions," a PHOSITA would recognize, in light of the above discussion, that it is not what it is claimed to be. Gonsalves Decl., ¶124. The set of reservations made in this manner would be inferior and not align with what the patron would have chosen. *Id.* This acts against the goal Waytena set out to satisfy, introducing substantial questions of operability. *Id.* A PHOSITA would not be motivated to adopt Petitioner's proposal. *Id.* Accordingly, Waytena fails to render obvious "software selects," as proposed by the Petitioner.

Next, Waytena discloses in detail how its "match" works:

Once the relevant information has been retrieved, module 203 retrieves pre-programmed rules 409 for validity determination of reservation requests.

...

For example, a rule might specify that the patron may not have more than five reservations at a time; or another rule may specify a maximum distance between the attractions for two successive reservations.

...

Module 203 may also check, for example, that members of the group are of sufficient age and height to enjoy the selected attraction by comparing information in patron information storage 202 with the description data of the attraction in the attraction description storage 205. Module 203 may also ensure that no conflicting reservations have been made. Other processing based on locally available information may also be performed to filter or otherwise validate the request.

Waytena, 15:18-37.

Waytena discloses that a valid reservation request requires party information to match the attraction data exactly. This teaches away from the '983 Patent, which has no such requirement. The system disclosed in the '983 Patent ranks the attractions from high to low and may include rule out options, which means attractions with high rating are more likely be chosen, and lower ranked attractions may be chosen even if the probability is low; attractions will be ruled out only in some situations such as when the consumer does not meet the age requirement or the attraction does not meet the wheelchair transfer requirement. Thus, Waytena fails to render claim 1[c] obvious.

The distinction between “software select” and “user select” is also emphasized in the last clause of claim 1. Gonsalves Decl., ¶185. Instead of reciting “customized by said party,” claim 1 teaches “whereby said itinerary is customized for said party.” “Customized for” indicates that the software makes the selection of the itinerary for the party, whereas “customized by” implies that the selection is done by the party. *Id.*

2. Independent Claim 3

Petitioner asserts that “Claims 3[pre]-3[e] are near identical to claims 1[pre]-1[e].” Accordingly, the rebuttal above for claim 1 also applies to claim 3. Gonsalves Decl., ¶¶126-127.

3. Dependent Claim 4

Claim 4 would not have been obvious over Waytena for the reasons already expressed during the prosecution of the '983 Patent. *See* Gonsalves Decl., ¶128; EX1002, pp.47:24-48:3. (Waytena discloses the preferences of the party being captured. However, the only use Waytena offers for these preferences once collected is to narrow the list of attractions from which the patron must select. Waytena, 14:20-24. Although Waytena allows the patron to filter the available choices based on preferences, the customization and creation of an itinerary must

still be done manually by the patron before being validated by filtering module

203. Filtering module 203 makes no use of the collected preferences for the purpose of evaluation.)

4. Dependent Claim 5

Claim 5 would not have been obvious over Waytena for the reasons already expressed during the prosecution of the pending application. *See* Gonsalves Decl., ¶129; EX1002, p.48:4-11. (Claim 5 requires the attributes to be used by the software in step d) as the software selects the second set of attractions. “Age 221, height 223, weight 224, and flags 225 are used by filtering module 203 to determine validity of reservation requests.” Waytena, 7:29-31. Waytena doesn’t teach use of party attributes to select attractions...that remains the domain of the patron.)

5. Dependent Claim 8

Claim 8 would not have been obvious over Waytena for the reasons already expressed during the prosecution of the pending application. *See* Gonsalves Decl., ¶130; EX1002, p.49:4-20. (Claim 8 calls for a scheduled time to be provided for an attraction when the attraction is selected by the software. Waytena requires the patron to select not only the attraction, but also the time: “[t]he request may

specify a particular time of day that the patron is interested in, or it may simply request the next available time for attending the attraction.” Waytena, 12:27-29. However, if the patron selects “next available time” when selecting an attraction and requesting a reservation, the software may calculate a time based a virtual queue, throughput and cycle time values. Waytena, 20:60-64. This is similar to the mechanism employed by Laval. However, the prior art doesn’t suggest that the software is able to select both the attraction and the time without the patrons performing the attraction selection.)

6. Dependent Claim 10

Claim 10 would not have been obvious over Waytena for the reasons already expressed during the prosecution of the pending application. *See* Gonsalves Decl., ¶131; EX1002, pp.50:23-51:3. (Waytena provides a way to grant or deny a reservation requested for a selected attraction at a selected time. Waytena, 23:3-24. The same process may propose a time for a reservation request for a selected attraction, if no specific time is selected. *Id.* Further, Waytena provides that travel time is included in the granted, denied, or proposed times. However, Waytena doesn’t teach software that performs the selection of both an attraction and a corresponding time for incorporation into an itinerary, which is the subject matter claim 10.)

7. Dependent Claim 13

Claim 13 would not have been obvious over Waytena for the reasons already expressed during the prosecution of the pending application. *See* Gonsalves Decl., ¶132; EX1002 p.51:22-28 (Waytena does not teach any interaction of the '770 invention with access control systems. The section cited by the Examiner describe a mechanism to inform the '770 invention that a reservation has been kept. Waytena, 19:9-19. It does not relate to any mechanism or process for denying entry to an attraction on the basis of the itinerary.)

8. Dependent Claim 17

Claim 17 would not have been obvious over Waytena for the reasons already expressed during the prosecution of the pending application. *See* Gonsalves Decl., ¶133; EX1002 p.52:11-29 (The Examiner has interpreted “auxiliary output device 110 such as audio speaker or vibration mechanism” as meeting the needs of Applicants’ paragraph 0261: ‘The next event indicated on an itinerary form 400 by next event banner 420, might instead be announced audibly in the language of the party’s preference,” to which claim 17 is drawn, requiring “at least a portion of said itinerary is announced audibly by said presentation means.” Even with the explicit teaching of Waytena that ‘The reservation alert issued by module 204 may take the form of a visual indication on user interface

201, optionally accompanied by an auditory indication such as a beep, voice message, or other distinctive sound,” Waytena, 18: 59-62, Applicants’ argue that an “auditory indication,” even one in the form of a voice message, is not the same as “the next event indicated on an itinerary . . . might instead be announced audibly in the language of the party’s preference.”)

9. Dependent Claim 18

Claim 18 would not have been obvious over Waytena for the reasons already expressed during the prosecution of the pending application. *See* Gonsalves Decl., ¶134; EX1002 pp.52:30-53:12 (Waytena teaches that an indication from a reservation computer that an attraction is unavailable removes the attraction from the itinerary. However, Waytena does not teach that such an indication can prevent the patron from wasting time attempting at least one reservation request before the patron is informed that the attraction is not available. In ’770 Figure 7, the manual request is received at 702, necessarily in advance of rejection at 722. Applicants’ claim 18 provides that the software operating in step d) performs the selection of attractions for the itinerary informed by the reservation computer whether attempted reservation requests were denied.”)

10. Dependent Claim 19

Claim 19 would not have been obvious over Waytena for the reasons already expressed during the prosecution of the pending application. *See* Gonsalves Decl., ¶135; EX1002 pp.53:13-54:14 (Waytena teaches that an empirical measurement of patrons not utilizing reservations is a basis for overbooking reservations for an attraction. Waytena describes a calculation that affects the demand on an attraction by increasing or decreasing an “interleave ratio”. However, Waytena’s interleave ratio has no effect on the likelihood that an attraction is selected. The interleave ratio moderates demand for an attraction having a certain probability of being selected by only permitting a certain number of reservations per time period. Since the probability of being selected is not reduced, reservations are made at the same rate, regardless of the interleave ratio, until the attraction has no more time slots available, at which point no further attraction reservations are granted. However, even then, the probability that a patron will select an attraction is unchanged. This is the effect predicted by Applicants in paragraph 0025: “with such an imbalance of demand, the system of Mahoney et al. will fail as late arriving visitors find that there are no reservations available for any of the ‘E’ attractions, or even ‘D’s.” Instead, Applicants teach that “One preferable method for preventing this capacity overrun is to attenuate the rating of that attraction [having excessive demand] by a factor sufficient to

reduce the anticipated itinerary demand to an amount such that the allocated capacity should be sufficient. By statistically lowering the likelihood of an attraction to be selected for inclusion in an itinerary, the directed demand can be moderated.” Claim 19 alleviates the problem of no reservations being available for late-arriving visitors.)

11. Dependent Claim 20

Claim 20 would not have been obvious over Waytena for the reasons already expressed during the prosecution of the pending application. *See* Gonsalves Decl., ¶136; EX1002 p.54:15-25 (Track[ing] specifically the portion of the demand for an attraction that is produced by the itinerary generation process, i.e., directed demand, can provide valuable feedback for control of the itinerary generating process itself, and other integrated reservation making systems.)

12. Dependent Claim 21

Claim 21 would not have been obvious over Waytena for the reasons already expressed during the prosecution of the pending application. *See* Gonsalves Decl., ¶137; EX1002 p.54:26-31 (Waytena enables patrons to select attractions and request reservations for those attractions selected. In the present

invention, the software provided is operable to select attractions itself, and make reservations.)

13. Dependent Claim 23

Claim 23 would not have been obvious over Waytena for the reasons set forth below. See Gonsalves Decl., ¶¶138-140. The proposed messages from Waytena do not teach the limitation disclosed by claim 23. Gonsalves Decl., ¶139. Claim 23 specifies that “each of said first set of messages’ should be selected from a group consisting of a marketing message, a discount offer, and a recommendation.” The Petitioner suggests that Waytena’s “reservation alert,” conditioned on “a reserved time is approaching,” should be considered an alarm, reminder, or alert. Gonsalves Decl., ¶139. However, a PHOSITA would likely categorize it as an alarm, reminder, or alert, however, none of which are recognizable as members of the genus required by the claim. Gonsalves Decl., ¶¶138-139. Waytena’s reminder/alert differs from a simple user-selectable 5-10 minute warning or one computed from expected travel time; it does not fall within the required genus. Gonsalves Decl., ¶139.

14. Dependent Claim 24

Claim 24 would not have been obvious over Waytena for the reasons already expressed during the prosecution of the pending application. *See* Gonsalves Decl., ¶141; EX1002 pp.55:19-56:2 (Waytena does not teach that software performs the selection of attractions for the itinerary, filtering module 203 does not represent a decision-making routine to perform the function that Applicants claim in Claim 24.)

15. Dependent Claims

Additionally, all dependent claims (including those discussed above) are necessarily valid in light of Petitioner's failure to prove claim 3 invalid. *In re Fine*, 837 F.2d at 1076; MPEP § 2143.03.

D. Ground 4: Waytena in View of Herz

Petitioner admits Ground 3 is unpersuasive, particularly with regard to claim 1[c]: “[t]o the extent Waytena is determined not to disclose or render obvious certain elements of claims 1 and 3 discussed below, such would have been obvious over Waytena in view of Herz.” Petition, p.69.

Even though Petitioner asserts “Waytena in view Herz renders obvious Waytena’s PCD presenting an itinerary, or schedule, of computer-selected

attractions, without the party having to select which attractions to include,”

Petition, p.70, the facts disclosed by Herz and Waytena support the opposite conclusion. Gonsalves Decl., ¶¶143-169.

Prior art is analogous if it is from the same field of endeavor or if it is reasonably pertinent to the particular problem the inventor is trying to solve. *Circuit CheckInc. v. QXQInc.*, 795 F.3d 1331, 1335 (Fed. Cir. 2015). However, “[i]f [a reference] is directed to a different purpose, the inventor would accordingly have had less motivation or occasion to consider it.” *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992).

Similar to Waytena’s attractions list 541, Herz discloses, “[t]he determined subset of video programs is then presented to the customer for selection in the conventional manner.” Herz, 4:9-5:18. A PHOSITA would understand that the prior art, including Herz, teaches *selection by the user*. Gonsalves Decl., ¶162.

Waytena and Herz involve different fields of invention. Gonsalves Decl., ¶148. Petitioner asserts that “[b]oth Waytena and Herz are in the field of systems and methods that assist parties in identifying and scheduling desirable attractions (e.g., theme park rides in Waytena and movies or shows in Herz).” Petition, p.70. However, Waytena describes the field of invention as relating “to scheduling patron reservations in facilities offering numerous attractions” Waytena, 1:8-9,

while Herz describes the field of invention as, “controlling broadcast of and/or customer access to data such as video programs” Herz, 1:2-3.

The '983 Patent and Waytena belong to a common field of invention, each aiming to guide guests to desirable attractions. Gonsalves Decl., ¶149. Both patents teach that *attractions have a location*, emphasize *travel time between attractions*, and advocate for the allocation of *limited attraction capacity*. *Id.* Herz, on the other hand, is in a non-analogous field, scheduling broadcast of video programs and other data. Gonsalves Decl., ¶146, 150-151. First, in Herz’s perspective, *programs* do not have a location; instead, the inverse is true: *people* have a location to which programs must be supplied. Gonsalves Decl., ¶150; *see also* Herz 5:34-37 (“clustering customer profiles for combinations of customers expected to view the video programs at a particular customer location at particular times on particular days”). Second, customers *need not travel between programs*, “they simply switch channels.” Gonsalves Decl., ¶150; *see also* Herz, 34:11. Lastly, Herz teaches an optimization, *i.e.*, would draw the largest audience, when picking among “candidate programs available for broadcast.” Gonsalves Decl., ¶150; *see also* Herz 23:21-50. Thus, Herz sees an *unlimited* program viewing capacity. Gonsalves Decl., ¶150.

While both Waytena and Herz aim to best satisfy their users, given the substantial dissimilarities in the fundamental nature of the resources and how they

are managed in Waytena and Herz, a PHOSITA would not recognize or anticipate any meaningful contribution that Herz's domain—scheduling a television broadcast—could make to generating an itinerary. Gonsalves Decl., ¶151.

Therefore, they would not be motivated to consider the proposed combination.

Petitioner admits that “Herz teaches this minimizes the need for parties to manually search for and select content” Petition, p.70. Yet Petitioner proposes Herz's mechanism as an obvious means to transforming the reservation system of Waytena into an itinerary generator. That proposal would not work technically, as Herz is reliant on the nature of video programming. Gonsalves Decl., ¶164.

Petitioner mischaracterizes Herz, omitting an important “time slot” constraint: “Herz's computer selects programs for time slots [from among all programs available in the corresponding time slot] that match a party's profile, creating ‘a collection of only those video programs having content profiles which best match the customer's profile and hence are most desirable during the relevant time frame.’” Petition p.71. A PHOSITA would recognize that Herz's “virtual channels” technique relies on “establish[ing] the degree of correlation between the *preferences* of the . . . customers and the video programming available during each video programming *time slot*.” Herz, 10:10-12.

A PHOSITA would understand what an ordinary broadcast or cable channel looks like, where many cable channels show movies one after another. In contrast

to the programming on ordinary broadcast channels that often leads to channel surfing, Herz aims to ensure that there is something for everybody in the sources being distributed. Herz achieves this by teaching a preferences-based algorithm to produce *sources* well-suited to the audience. *See* Herz, 23:63-24:10. Herz uses “an agreement matrix which establishes the degree of correlation between the preferences of the . . . customers and the video programming available during each video programming *time slot*.” Herz, 10:10-12. The “agreement matrix is used . . . to create ‘virtual’ data channels from the available data *sources*.” Herz, 9:46-48.

Petitioner asserts that since “Waytena also discloses allowing a party to select ‘next available time’ for each recommended attraction . . . A POSITA would have thus understood that the PCD could simply use ‘next available time’ as a default and create a complete itinerary itself.” Petition, pp. 56-57. However, a PHOSITA would recognize that Waytena, in view of Herz, fails to respect the time slots that are the basis of operation corresponding to Herz’s recommendations. This is because the use of Waytena’s “NEXT AVAILABLE button 563” sets a “variable called timeReq...707 to the *current time*,” effectively disregarding the limitations of how Herz operates. Waytena, 14:36-51 (emphasis added). Thus, the problems that Herz and Waytena try to solve are different.

Additionally, all dependent claims are necessarily valid in light of Petitioner's failure to prove claim 3 invalid under Ground 4. *In re Fine*, 837 F.2d at 1076; MPEP § 2143.03.

E. Ground 5: Waytena (Alone or as Modified by Herz) in View of Doi

Claim 7 would not have been obvious over Waytena (as modified by Herz) due to the reasons already expressed during the original prosecution of the '983 Patent. See Gonsalves Decl., ¶170; EX1002 pp.48:22-49:3 (Waytena does not refer to privileges of the party that distinguish between attractions. The Examiner has tried to point out such privilege in Waytena. However, rather than a privilege, Waytena instead describes a way of estimating the likelihood of a reservation being kept. Waytena, 20:51-55). Additionally, Claim 7 is valid because it is based on independent claim 3. *In re Fine*, 837 F.2d at 1076; MPEP § 2143.03.

F. Ground 6: Waytena (Alone or as Modified by Herz) in View of Doi

Each of the below dependent claims is valid at least because they are based on a valid independent claim. See *In re Fine*, 837 F.2d at 1071; MPEP § 2143.03.

1. Dependent Claim 11

Claim 11 would not have been obvious over Waytena (as modified by Herz) in view of Doi due to the reasons already expressed during the original

prosecution of the '983 Patent. *See* Gonsalves Decl., ¶171; EX1002 p.51:4-15

(Since the invention of '770 does not select attractions, there is no mechanism proposed by Waytena to select replacement attractions that substantially avoid attractions already visited.)

2. Dependent Claim 22

Claim 22 would not have been obvious over Waytena due to the reasons discussed above in Ground 1, claim 22. Both Sim and Doi rely on their users to select attractions. Gonsalves Decl., ¶222. Since it is the users who are making the decisions, there is no software to apply a perturbation to a desirability of a first attraction of the first set of attractions.

VI. Conclusion

The Board should deny institution because Petitioner has failed to demonstrate a reasonable likelihood of prevailing as to any challenged claim because none of its six grounds disclose all elements of any of the asserted claims.

Date: January 17, 2024

Respectfully submitted,

/s/ Jay P. Kesan

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LIST OF EXHIBITS

Exhibit No.	Descriptions
2001	Declaration of Dr. Gregory Gonsalves
2002	Detailed Comparison Table
2003	Canora <i>et al.</i> , Final Rejection
2004	Canora <i>et al.</i> , Appeal Rejection
2005	U.S. Patent No. 6,173,209 (“Laval”)
2006	U.S. Patent No. 5,502,806 (“Mahoney”)
2007	U.S. Patent No. 5,850,617 (“Libby”)
2008	U.S. Patent No. 5,940,803 (“Kanemitsu”)

CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24, the undersigned certifies that the foregoing Patent Owner's Preliminary Response contains less than 14,000 words excluding the table of contents, table of authorities, certificate of service, certificate of word count, and appendix of exhibits. Patent Owner has relied on the word count feature of the word processing software used to create this paper in making this certification.

By: /s/ Jay P. Kesan
Jay P. Kesan
Reg. No. 37,488

Counsel for Patent Owner

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that on the date indicated below, a complete and entire copy of this submission was served by email to Petitioner's counsel via the email addresses of record as provided in Petitioner's Service Information in the October 11, 2023 Petition submission.

Respectfully submitted,

Dated: January 17, 2024

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