

Exhibit J

**UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF PENNSYLVANIA**

ARRIVALSTAR S.A. and MELVINO
TECHNOLOGIES LIMITED,

Plaintiffs,

v.

SHIPMATRIX, INC., UNITED
PARCEL SERVICE, INC. and FEDEX
CORPORATION,

Defendants.

CASE NO. 07-0415

Honorable Joy Flowers Conti

Special Master Paul Beck

PLAINTIFFS' OPENING CLAIM CONSTRUCTION BRIEF

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I. INTRODUCTION

Pursuant to Rule 4.3 of the Local Patent Rules for the Western District of Pennsylvania and the Special Master's Process and Schedule for Claim Construction filed February 15, 2008, Plaintiffs ArrivalStar S.A. and Melvino Technologies Limited (collectively, "ArrivalStar") submit their Opening Claim Construction Brief and an identification of supporting extrinsic evidence for ArrivalStar's two patents-in-suit,¹ U.S. Patent No. 6,748,318 ("the '318 patent") (Ex. A), entitled "Advanced Notification Systems and Methods Utilizing A Computer Network," issued June 8, 2004, and U.S. Patent No. 6,904,359 ("the '359 patent") (Ex. B), entitled "Notification Systems and Methods with User-Definable Notifications Based Upon Occurrence of Events," issued June 7, 2005 (the '318 and '359 patents are sometimes referred to herein collectively as "the Patents-in-Suit").

The purpose of this brief is to assist the Special Master in resolving the legal issues surrounding the construction of the disputed claim terms and phrases. Pursuant to LPR 4.2, the parties have filed a Joint Claim Terms/Phrases Chart in which the disputed terms and phrases are identified. For the convenience of the Special Master, a copy of the Joint Claim Terms/Phrases Chart is attached as Exhibit C.

ArrivalStar anticipates that it will require approximately ten (10) hours in total to present its case at the claim construction hearing.

II. THE TECHNOLOGY AT ISSUE

As their titles suggest, the '318 and '359 patents generally relate to systems and methods for providing electronic messages to users concerning the travel status of vehicles. The

¹ Plaintiffs have withdrawn their claims with respect to U.S. Patent No. 6,748,320.

specifications of the '318 and '359 patents broadly describe one aspect of the inventions of those patents as follows:

The present invention generally relates to data communications and information systems and, more particularly, advance notification systems and methods for notifying users in advance of the impending arrival of a vehicle or user, for example but not limited to, a bus, train, delivery van, plane, fishing vessel, or other vessel, or user walking or riding, to or at a particular stop.

(Ex. A, '318 patent, col. 1, ll. 43-39; Ex. B, '359 patent, col. 1, ll. 29-36.) In addition to this broad description of the inventions of the Patents-in-Suit, the patents are also specifically directed to notification systems and methods utilized by “the commercial overnight package delivery industry” (Ex. A, '318 patent, col. 2, ll. 24-25; Ex. B, '359 patent, col. 2, ll. 11-12), such as the accused systems and methods of Defendants UPS and FedEx in this case.

The Patents-in-Suit claim systems and methods for providing users with pre-arrival notifications, as well as post-arrival notifications, concerning vehicle status. Specifically, the '318 patent “provides for *advance* notification systems and methods for notifying a user of an impending arrival of a vehicle as the vehicle approaches a particular location.” (Ex. A, '318 patent, col. 3, ll. 7-10; see also Ex. A, '318 patent, claim 1, col. 38, ll. 14-15 (emphasis added).) In contrast, the '359 patent is directed to systems and methods that provide for pre-arrival as well as post-arrival notifications. Unlike the claims of the '318 patent, none of the claims of the '359 patent include a limitation providing for notification to a user solely “in advance of an impending arrival of a vehicle at a vehicle stop.” (See Ex. A, '318 patent, claim 1, col. 38, ll. 14-15; see also Ex. A, '318 patent, claims 24, 47, 70, 93, 116.) Indeed, none of the claims of the '359 patent includes the limiting terms “advance” or “advanced.” Instead, the '359 patent claims methods and systems that may provide notification to users *in advance of, at the time of, or after* a vehicle’s arrival at a vehicle stop.

Representative claim 1 of the ‘359 patent specifies a notification system that permits a user to define one or more events relating to the status of a vehicle the occurrence of which event or events will cause the system to notify the user of such occurrence, where the one or more events includes at least one of the following:

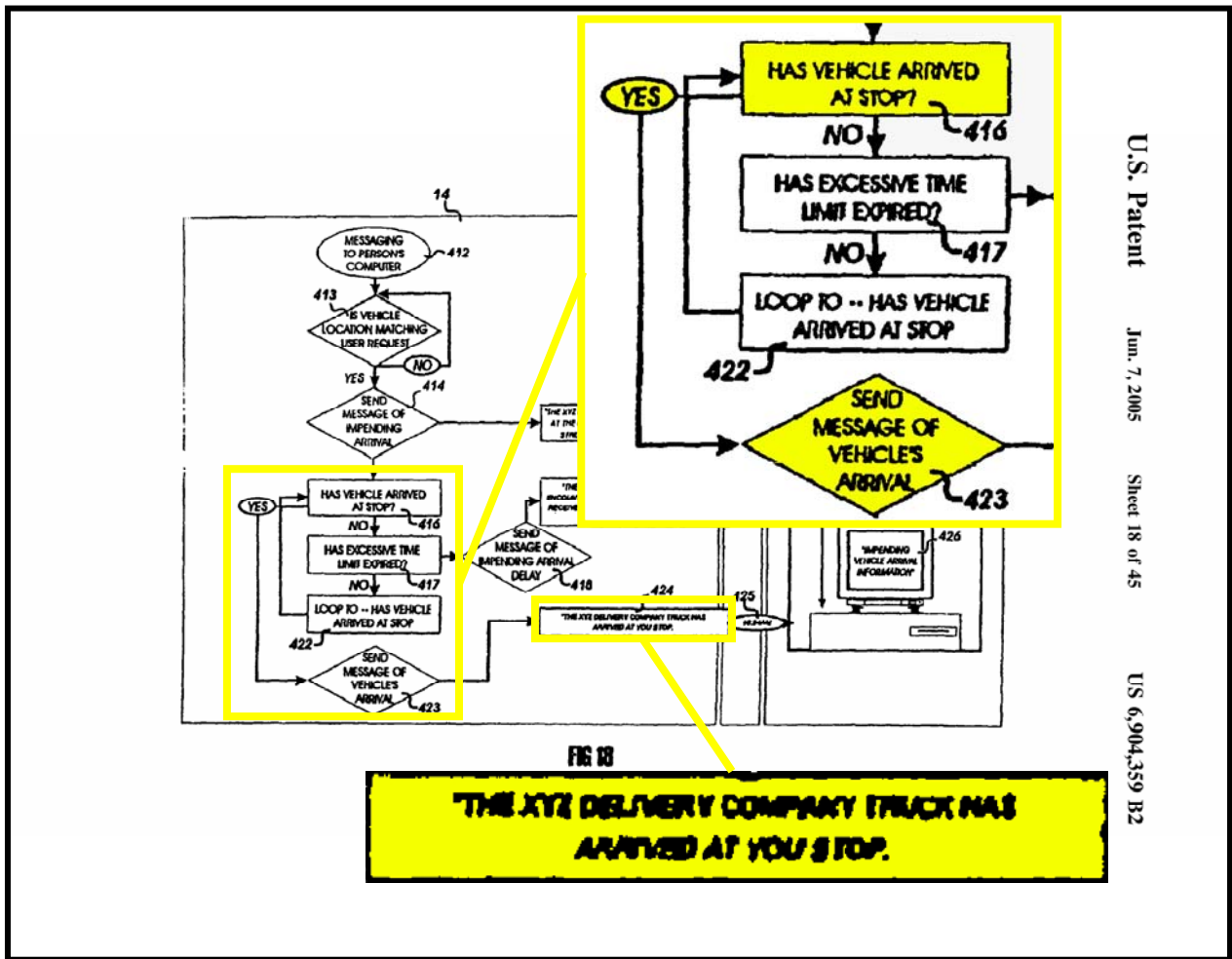
distance information specified by the user that is indicative of a distance between the vehicle and the location, location information specified by the user that is indicative of a location or region that the vehicle achieves during travel, time information specified by the user that is indicative of a time for travel of the vehicle to the location, or a number of one or more stops that the vehicle accomplishes prior to arriving at the location.

(Ex. B, ‘359 patent, claim 1, col. 35, ll. 37-45.) The first, third and fourth “events” described in claim 1 of the ‘359 patent relate to the status of a vehicle *before* it arrives at a location. Specifically, the first event relates to information concerning the “distance *between the vehicle and the location,*” the third relates to information concerning “a time for travel of the vehicle *to the location,*” and the fourth relates to information concerning the number of stops “the vehicle accomplishes *prior to arriving at the location....*” (Id. (emphasis added).)

Unlike the advanced, pre-arrival information addressed by the first, third and fourth events described in claim 1 of the ‘359 patent, the second event relates to information concerning the arrival of a vehicle at a location. Specifically, the second event concerns “*location information* specified by the user that is indicative of *a location* or region *that the vehicle achieves during travel.*” (Id. (emphasis added).) Thus, the arrival destination of a vehicle (e.g., a delivery vehicle) is *a location* that the vehicle achieves during travel – it is the *final* location. In the example of the second event described in claim 1 of the ‘359 patent, a user would not be notified of the occurrence of a pre-arrival event, but instead of the arrival itself.

This interpretation of claim 1 of the ‘359 patent is supported not only by the plain language of the claim, but also by the patent’s specification, which provides a specific example

of an arrival notification. As illustrated below, Figure 18 of the '359 patent, discloses a flowchart that includes the following steps of notifying a user that a delivery vehicle has already arrived at the user's stop: (1) "HAS VEHICLE ARRIVED AT STOP?"; (2) if "YES," then (3) "**SEND MESSAGE OF VEHICLE'S ARRIVAL,**" which message reads "THE XYZ DELIVERY COMPANY TRUCK **HAS ARRIVED** AT YOU[R] STOP." (Ex. B, '359 patent, Fig. 18 (emphasis added).)



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(Ex. B, '359 patent, Fig. 18 (emphasis added).)

The notifications provided by the claimed technology of the '318 and '359 patents do not need to precede immediately a vehicle's arrival at a location; nor do the notifications need to

define precise or immediate times of arrival. Indeed, the plain language of claim 23 of the ‘318 patent makes clear that notifications as defined in dependent claim 1 need not provide a vehicle arrival time at all, but may instead inform a user “that the vehicle is delayed and thus will not arrive at a predetermined scheduled arrival time.” (Ex. A, ‘318 patent, claim 23, col. 39, ll. 16-18.) The specifications of the ‘318 and ‘359 patents further make clear that the claimed notifications of the patents can occur minutes (see, e.g., Ex. A, ‘318 patent, Fig. 1; Ex. B, ‘359 patent, Fig. 1 (“THE XYZ TRUCK IS APPROACHING YOUR STOP AND IS 5 MINUTES AWAY”)), hours or even *days* before a vehicle’s scheduled arrival time:

[M]essage timing and activation of impending arrival messages to users can be set *at the start of the route or day*, or in some cases *the day/s before the vehicle is to arrive*. By sending impending arrival messages *early*, users can rearrange their schedules for meeting a delivery vehicle/driver when he arrives. As an example, a person taking a lunch break or leaving a delivery area, will know of particular deliveries scheduled in a certain day and the impending arrival time/s.

(Ex. A, ‘318 patent, col. 37, ll. 59-67; Ex. B, ‘359 patent, col. 34, line 36 – col. 35, line 7 (emphasis added).) In this regard, the Patents-in-Suit describe the benefit of allowing a user to receive “early” arrival messages under certain circumstances.

Although the ‘318 and ‘359 patents disclose sophisticated systems for tracking the movement of vehicles, such as with an on-vehicle Global Positioning System (“GPS”), the patents also provide examples of simpler systems for accomplishing the same task. (See, e.g., Ex. A, ‘318 patent, col. 13, ll. 61-63; Ex. B, ‘359 patent, col. 11, ll. 52-54 (“FIGS. 8, and 9, are illustrations of advance notification system configurations, *without the use of a Global Positioning System (GPS)* as shown in FIGS. 1, 2, 6, 7, and others.”) (emphasis added).) Indeed, the Patents-in-Suit specifically disclose the process of tracking a vehicle’s movement by logging information about package deliveries using barcode scanners and other handheld remote data entry devices such as those used in the accused systems and methods of Defendants UPS

and FedEx – the type of barcode and handheld devices commonly seen when UPS and FedEx delivery personnel make business and residential deliveries and pickups. Figures 9 and 10 of the Patents-in-Suit further illustrate the Vehicle Control Unit (“VCU”) in embodiments that utilize “User Input Controls” including “bar code reader[s]” (see Exs. A and B, ‘318 and ‘359 patents, Figs. 9 and 10), but that do not include “(GPS) Tracking Sensor[s]” (as shown in Figures 7 and 8). The specification of the ‘318 patent provides a similar description of an embodiment of the claimed invention that utilizes a “package delivery indicator” in conjunction with an optional barcode scanner or handheld data entry device:

In a first system configuration a vehicle control unit includes a vehicle communication mechanism controlled by the vehicle control mechanism, a global positioning system (GPS) location device *or package delivery indicator for determining actual vehicle positioning*, and, optionally, *one or more input devices, e.g., a bar code scanner, hand held remote data entry device ...* for the purpose of relaying messages to the [Base Station Control Unit].

(Ex. A, ‘318 patent, col. 3, ll. 21-30.)

The specifications of the Patents-in-Suit provide two further specific examples of “simple” vehicle tracking and monitoring systems that determine a vehicle’s location by logging a vehicle’s delivery and pick-up stops.

[I]n one of the simplest configuration, the delivery driver has no user functions and the VCU is *not equipped with a location-determining device*. The VCU is equipped with *a package sensor only*, and the package sensor sends signals to the BSCU *for the actual delivery of a package at a stop*.

(Ex. A, ‘318 patent, col. 12, ll. 21-26; Ex. B, ‘359 patent, col. 10, ll. 14-19 (emphasis added).)

Similarly, “in a[nother] simple configuration, the delivery driver has no user functions and the VCU *sends package, delivery, and time information only* to the BSCU 14.” (Ex. A, ‘318 patent, col. 12, ll. 11-13; Ex. B, ‘359 patent, col. 10, ll. 4-6 (emphasis added).)

Consistent with the “simple” vehicle tracking technology disclosed in the Patents-in-Suit, there is no requirement that such technology utilize “real-time” or “live” tracking processes, such as the virtually instantaneous vehicle location feedback provided by a GPS system. In this regard, the specifications of the Patents-in-Suit disclose embodiments of the invention in which vehicle tracking information is only sent to the base station on an intermittent or “triggered” basis:

As an example, when vehicles have extended and long drives, normally in rural or remote areas, *communication can be stopped until the vehicle reaches a predetermined location, time, or when polled by the (BSCU) 14*. Upon reaching the predefined location, or the expiring of a predefined time period, or when polled by the (BSCU) 14, communication is restarted. Additionally, *the actual communication can be triggered by the activation of a User Input Control (UIC) 21a*.

(Ex. A, ‘318 patent, col. 13, ll. 43-51; Ex. B, ‘359 patent, col. 11, ll. 34-42 (emphasis added).)

As stated, the Patents-in-Suit define “User Input Controls” to include barcode readers, such as those used in the disclosed “simple” embodiments of the vehicle tracking systems and methods. (See, e.g., Exs. A and B, ‘318 and ‘359 patents, Figs. 9 and 10) – and such as those used in the accused systems and methods of Defendants UPS and FedEx. “[W]hen a vehicle driver activates the User Input Control (UIC) 21a (when a package is delivered and sensor is activated), communication from the Vehicle Control Unit (VCU) 12 to the Base Station Control Unit (BSCU) 14 can be established.” (Ex. A, ‘318 patent, col. 13, ll. 51-56; Ex. B, ‘359 patent, col. 11, ll. 42-47 (emphasis added).)

III. THE RULES OF CLAIM CONSTRUCTION

The basic rules of claim construction are familiar to patent lawyers and judges. Accordingly, ArrivalStar will not repeat all of the well established principles. Instead, the rules of claim construction that have particular significance to this proceeding are summarized below.

In this case, ArrivalStar and Defendants dispute whether the identified disputed terms and phrases in the Patents-in-Suit should be construed according to their “ordinary and customary meaning” given by persons of ordinary skill in the art at the time of the invention, or instead assigned meanings that are limited to the preferred embodiments disclosed in the patents’ specifications. Thus, it is important to clarify the law regarding the role of the specification in construing claims.

A. THE GENERAL LAW OF CLAIM CONSTRUCTION

In Phillips v. AWH Corp., 415 F.3d 1303, 1314 (Fed. Cir. 2005), the Federal Circuit clarified that, when construing claims, the primary focus remains on the claims, both asserted and unasserted. “Differences among claims can also be a useful guide [also] in understanding the meaning of particular claims terms.” Id. For example, the doctrine of claim differentiation creates a rebuttable presumption that each claim in a patent has different scope. Sunrace Roots Enter., Co. v. SRAM Corp., 336 F.3d 1298, 1302-1303 (Fed. Cir. 2003). That presumption, however, “is especially strong when the limitation in dispute is the only meaningful difference between an independent claim and dependent claim, and one party is urging that the limitation in the dependent claim should be read into the independent claim.” Id. at 1303.

Although the specification is the single best source for understanding the meaning of the claims, it cannot be used as a tool to redefine otherwise understood phrases and terms. Phillips, 415 F.3d at 1323. “For instance, although the specification often describes very specific embodiments of the invention, [the Federal Circuit] has repeatedly warned against confining the claims to those embodiments.” Id. “That is not just because section 112 of the Patent Act requires that the claims themselves set forth the limits of the patent grant, *but because persons of ordinary skill in the art rarely would confine their definitions of terms to the exact*

representations depicted in the embodiments.” Id. (emphasis added). “In sum, subject to any clear and unmistakable disavowal of claim scope, the term[s] . . . take the full breadth of [their] ordinary meaning” Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc., 381 F.3d 1111, 1120 (Fed. Cir. 2004). “And, even where a patent describes only a single embodiment, claims will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.” Id. at 1117.

B. MEANS-PLUS-FUNCTION CLAIM ELEMENTS

When a claim term is set forth as a “means” for performing a function, and there is not sufficient structure stated in the claim to perform the claimed function, the claim term is a “means-plus-function” element, and is governed by 35 U.S.C. § 112, ¶6. In these instances, the claimed “means” is interpreted as covering the corresponding structure shown in the patent specification and equivalent structures thereof. Specifically, 35 U.S.C. § 112, ¶6 states the following:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

Thus, for “means-plus-function” elements, the court first identifies the claimed function and then determines the structure in the specification that corresponds to that function.” Frank’s Casing Crew & Rental Tools, Inc. v. Weatherford Int’l, Inc., 389 F.3d 1370, 1376 (Fed. Cir. 2004); Medical Instrumentation and Diagnostic Corp. v. Elekta AB, 344 F.3d 1205, 1210 (Fed. Cir. 2003) (same); Smiths Indus. Medical Sys. Inc. v. Vital Signs, Inc., 183 F.3d 1347, 1357

(Fed. Cir. 1999) (“For a claim drafted as a means-plus-function under 35 U.S.C. § 112, ¶6, a court must first look to the patent specification to determine the ‘corresponding structure’ that performs the claimed function: the claim is then construed to cover that corresponding structure as well as ‘equivalents thereof.’”).

In this case, Defendants likely will attempt to construe the means-plus-function claim elements of the Patents-in-Suit to include more structure than is required to perform the recited functions. The Federal Circuit has cautioned, however, that “courts may not import functional limitations that are not recited in the claim, or structural limitations from the written description that are unnecessary to perform the claimed function.” Wenger Mfg., Inc. v. Coating Mach. Sys., 239 F.3d 1225, 1233 (Fed. Cir. 2001). In Wenger Mfg., the Federal Circuit rejected the district court’s importation of structure that was not necessary to perform the recited function. The claim called for an “air circulation means.” Wenger Mfg., 239 F.3d at 1233. Noting that the preferred embodiment only showed a device that recirculated air, the court held that the structure required a device that could recirculate air. Id. Reversing the district court, the Federal Circuit noted that “the court improperly restricted the ‘air circulation means’ limitation to structure that was disclosed in the preferred embodiment, but was not necessary to perform the recited function of circulating air.” Id. Moreover, the corresponding structure for a particular function must actually perform the recited function. Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus., Inc., 145 F.3d 1303, 1308-09 (Fed Cir. 1998). Structural features that do not actually perform the recited function or merely enable the corresponding structure to operate as intended do not constitute corresponding structure and thus do not serve as claim limitations. Id.; Asyst Tech., Inc. v. Empak, Inc., 268 F.3d 1364, 1371 (Fed. Cir. 2001).

While other legal principles apply, ArrivalStar has only highlighted a few predominant ones that have particular relevance to this case. ArrivalStar reserves its right to expand on the application of the others during the upcoming claim construction hearing.

C. A PERSON OF SKILL IN THE RELEVANT ART

The technology disclosed in the Patents-in-Suit patent relates to systems and methods for providing electronic messages to users concerning the travel status of vehicles. As such, a person working in this field typically has at least a basic knowledge and understanding of computer programming, database design, and computer/Internet communications systems. At the time the inventions of the Patents-in-Suit were created, Kelly Jones, the inventor in this case, had spent approximately five to six years educating himself concerning aspects of computer hardware technologies, software programming, database design and operation, and basic computer network communications systems relevant to the technology that is the subject of the Patents-in-Suit.

ArrivalStar asserts that a person of ordinary skill in the art is one who has, at a minimum, spent five years or more informally educating themselves in the same relevant areas of technology. Also included among those of ordinary skill in the art would be individuals with a working knowledge of the design and operation of advance notification systems relating to the status of vehicles.

IV. CONSTRUCTION OF THE DISPUTED CLAIM TERMS AND PHRASES

ArrivalStar proposes the following constructions for the disputed claim terms and phrases identified in the parties' Joint Claim Terms/Phrases Chart (Ex. C) and offers the following analysis in support of such proposed constructions.

A. THE '318 PATENT

ArrivalStar offers the following constructions for the disputed claim terms and phrases of the '318 patent.

1. "impending arrival"

ArrivalStar proposes that the phrase "impending arrival" be construed to mean "*to be about to reach a destination.*" Defendants' proposed construction – "[a]s, or shortly before, a vehicle approaches a vehicle stop" (Ex. C, Joint Claim Terms/Phrases Chart at 2) – is too limiting timewise. If Defendants agreed to define "as, or shortly before" to be a time period consistent with what is disclosed in the specification of the '318 patent, ArrivalStar would agree with such a construction. Specifically, as stated *supra* at page 5, the specification of the '318 patent discloses that notification messages concerning an "impending arrival" can occur even *days* before such arrival. (Ex. A, '318 patent, col. 37, ll. 59-62 ("message timing and activation of impending arrival messages to users can be set *at the start of the route or day*, or in some cases *the day/s before the vehicle is to arrive*") (emphasis added).)

If a "message" communicated to a user concerning an "impending arrival" can occur as early as "days" before such arrival, it necessarily follows that, in the context of the claim 1 and other claims of the '318 patent, an "impending arrival" is an arrival that can occur as late as "days" after the communicated message. Although the '318 patent provides examples of messages that occur "shortly before" a vehicle arrives at a stop (e.g., Ex. A, '318 patent, Fig. 1, which provides an example of a message sent five minutes prior to a vehicle's arrival), the further disclosure cited by ArrivalStar above clarifies that "impending arrival" cannot be read as narrowly as Defendants urge. Thus, Defendants' proposed construction for "impending arrival" should be rejected because it appears to contradict the meaning of the disputed term in light of the express language of the specification of the '318 patent. The phrase "impending arrival",

therefore, should be construed to mean “about to reach a destination” within an increment of time that can be as long as days.

2. “travel data” and “travel status”

ArrivalStar proposes that the phrases “travel data” and “travel status” each be construed to mean “information associated with moving from one place to another, such as, e.g., time, route, distance, and/or location information.” This proposed meaning is consistent with and supported by the plain language of the claims of the ‘318 patent. Specifically, dependent claims 5, 6 and 8 of the ‘318 patent define “travel data” as including “scheduled stop information,” “distance information,” and “timing information,” respectively. (Ex. A, ‘318 patent, col. 38, ll. 34-37, 41-42.) Because claims 5, 6 and 8 depend from independent claim 1 of the ‘318 patent, the phrase “travel data” in claim 1 cannot be limited to merely include the three examples offered in the dependent claims. Instead, “travel data” includes scheduled stop, distance, timing and other types of information associated with a vehicle’s status relative to a location. ArrivalStar’s proposed construction of “travel data” includes the three types of information identified in claims 5, 6 and 8, as well as other information identified in the specification of the ‘318 patent.

Defendants propose that the phrases “travel data” and “travel status” be construed to mean “live vehicle location information.” (Ex. C, Joint Claim Terms/Phrases Chart at 8.) However, neither the claims nor the specification of the ‘318 patent impose a limitation that such information be “live.” In offering their proposed construction, Defendants attempt to graft into the claims of the ‘318 patent a requirement that “travel data” derive from “live” or “real-time”-type information concerning a vehicle’s location – such as the information that might be generated by a GPS system. This proposed construction, however, is inconsistent with embodiments of the invention of the ‘318 in which information associated with a vehicle’s location derives from data that is collected based on intermittent (rather than “live” or “real-

time”) communications between a vehicle-related input device, triggered events, stored historical data concerning a vehicle’s travel (e.g., past route data), or the like. Defendants’ proposed construction ignores such embodiments.

As discussed above, the specification of the ‘318 patent discloses multiple embodiments of the invention in which a vehicle itself is not equipped with “location determining device,” but instead with “*a package sensor only*, and the package sensor sends signals to the BSCU *for the actual delivery of a package at a stop.*” (Ex. A, ‘318 patent, col. 12, ll. 24-26 (emphasis added).) Similarly, “in a[nother] simple configuration, the delivery driver has no user functions and the VCU *sends package, delivery, and time information only* to the BSCU 14.” (Ex. A, ‘318 patent, col. 12, ll. 11-13 (emphasis added).) As disclosed in the ‘318 patent, information concerning, for example, the location and time of a package delivery can be sent to the base station computer with a “User Input Control” (“UIC”) (Ex. A, ‘318 patent, col. 13, ll. 50-51), which UICs include barcode readers and other handheld data input devices. (See, e.g., Ex. A, ‘318 patent, Figs. 9 and 10.)

The plain language of dependent claims 5, 6 and 8, as well as the “simple” disclosed embodiments of the invention of the ‘318 patent, make clear that “travel data” includes information about the “time, route, distance, and/or location” of a vehicle that can derive, from among other sources, from data concerning discrete package deliveries or vehicle stops. There is no requirement that such data be “live vehicle location information” as proposed by Defendants. ArrivalStar’s proposed construction is supported by the claim language and the specification of the ‘318 patent.

3. “automated”

ArrivalStar proposes that the term “automated” be construed to mean “*making use of automated operations.*” As the term appears in claim 1 of the ‘318 patent, it is part of the phrase

“automated notification system.” The meaning assigned to the term, therefore, must be consistent with the context in which the term exists in the claim. By requiring that the “automated notification system” operate “automatically without human intervention” (Ex. C, Joint Claim Terms/Phrases Chart at 17), Defendants’ proposed construction would exclude embodiments of the invention of the ‘318 patent that are disclosed in the specification.

As discussed above, the ‘318 patent expressly discloses embodiments of the automated notification system that utilize “User Input Controls” (“UICs”) (Ex. A, ‘318 patent, col. 13, ll. 50-51), which UICs may include barcode readers and other handheld data input devices (see, e.g., Ex. A, ‘318 patent, Figs. 9 and 10). The processes of a vehicle driver scanning package information with a barcode reader or entering data concerning a package with a handheld data input device clearly require “manual,” “human intervention.” At the same time, such embodiments also include the process of automatically sending a message to a user (e.g., an e-mail, text message, or other electronic message) when a user’s notification “preferences” have been met. (See, e.g., Ex. A, ‘318 patent, Fig. 20, disclosing automated message in context of “Automated Method for Activating Notification When Last Package Was Delivered or Last Stop Was Made.”) As another of many examples, the specification of the ‘318 patent discloses the automated process of “*activat[ing]* [a] message based on vehicle location.” (Ex. A, ‘318 patent, Fig. 22, item 202 (emphasis added).)

Because these embodiments of the “automated notification system” of the ‘318 patent involve the combined use of “human intervention” (e.g., scanning a package with a barcode reader or entering data into a handheld data entry device) with automated processes (e.g., automatic message activation), the term “automated” in the context of “automated notification system” should be construed to mean “making use of automated operations.” In light of the

specification of the ‘318 patent, the term should not be construed so narrowly as to require that *all* claimed processes or operations occur “without human intervention.”

4. “monitoring” (as used in the ‘318 and ‘359 patents)

ArrivalStar proposes that the term “monitoring” be construed to mean “*keeping track of*.” This proposed construction is consistent with the specifications of the ‘318 and ‘359 patents, which disclose numerous examples of how information concerning a vehicle – or “travel data” – is “tracked” or kept track of by a computer – referred to in the specification as a Base Station Control Unit for later use in sending messages concerning a vehicle’s status to users. The specification makes clear that, contrary to Defendants’ assertion that “monitoring” include “*continual*[] determin[ation]” of travel data (Ex. C, Joint Claim Terms/Phrases Chart at 18 (emphasis added)), the term encompasses “tracking” that occurs on an intermittent, sporadic or “triggered” basis.

As an example, when vehicles have extended and long drives, normally in rural or remote areas, *communication can be stopped until the vehicle reaches a predetermined location, time, or when polled by the (BSCU)* 14. Upon reaching the predefined location, or the expiring of a predefined time period, or when polled by the (BSCU) 14, communication is restarted. Additionally, *the actual communication can be triggered by the activation of a User Input Control (UIC)* 21a.

(Ex. A, ‘318 patent, col. 13, ll. 43-51; Ex. B, ‘359 patent, col. 11, ll. 34-42 (emphasis added).)

Thus, communication with the Base Station Control Unit can be “triggered” when a driver “scans” a package on or off a vehicle with a barcode reader, or “logs” a package on or off a vehicle by use of a handheld data entry device.

The specifications of the ‘318 and ‘359 patents provide further examples of embodiments in which vehicle travel data is tracked based on a “package delivery attempt” rather than on “continual determination” of the vehicle’s location as proposed by Defendants and as disclosed in alternative (but not exclusive) embodiments of the inventions of those patents:

FIGS. 8, and 9, are illustrations of advance notification system configurations, *without the use of a Global Positioning System (GPS)* as shown in FIGS. 1, 2, 6, 7, and others. These configurations illustrate a system for notifying a Person's Computer (PC) 36 by *tracking each vehicle's package delivery attempt...*

(Ex. A, '318 patent, col. 13, ll. 61-66; Ex. B, '359 patent, col. 11, ll. 52-57 (emphasis added).)

In light of the teachings of the '318 and '359 patents, the term "monitoring" as used in the claims of those patents simply means "keeping track of." The definition should not be improperly limited to mean tracked information that is "continually determin[ed]" as urged by Defendants.

5. "message"

ArrivalStar proposes that the term "message" be construed to mean "*words and or symbols representing an idea.*" In the context of the claims of the '318 patent, Defendants proposed construction – "[a] communication that advises a user of the impending arrival of a vehicle at a vehicle stop" (Ex. C, Joint Claim Terms/Phrases Chart at 31) – is too narrow in view of the additional definition expressly given to the term by the dependent claims of the patent. Specifically, although independent claim 1 of the '318 patent does define the term as a "message ... to indicate impending arrival of the vehicle at the vehicle stop" (Ex. A, '318 patent, col. 38, ll. 21-26), dependent claims 3, 14, 15, 16 and 22 significantly broaden the definition of the term. Claims 3, 14, 15, 16 and 22 of the '318 patent define "message" so that it may include "an email that is communicated, at least in part, over the Internet," "a description of travel status of the vehicle," "an audible sound," "text or an image for display on a screen associated with the communications device" and "a map indicating the location of the vehicle," respectively. (Id.)

Thus, limiting "message" to the sole definition assigned to the term in claim 1 of the '318 patent would contradict the plain language of the additional claims of the patent. ArrivalStar's

broader proposed construction is consistent with the meaning given to the term by all the claims, as well as the specification, of the patent.

6. “predetermined scheduled arrival time”

ArrivalStar proposes that the phrase “predetermined scheduled arrival time” be construed to mean “*establishing, in advance, a planned time to reach a destination.*” On the other hand, Defendants propose that the phrase be construed to mean “[a] time, *in minutes and/or hours*, indicative of a planned or expected arrival of a vehicle at a vehicle stop.” (Ex. C, Joint Claim Terms/Phrases Chart at 36 (emphasis added).) With the exception of Defendants’ unnecessary limitation that the time be identified in terms of “minutes and/or hours,” the parties would agree on the construction of this phrase. The specification of the ‘318 patent provides express examples of the notification messages of the invention occurring *days* before the scheduled arrival of a vehicle. “[M]essage timing and activation of impending arrival messages to users can be set *at the start of the route or day*, or in some cases *the day/s before the vehicle is to arrive.*” (Ex. A, ‘318 patent, col. 37, ll. 59-62 (emphasis added).) Thus, there is no reason to limit the definition of “predetermined scheduled arrival time” to a specified time in “minutes and/or hours” – particularly when the ‘318 patent provides an example of a planned arrival occurring days after a notification message.

ArrivalStar’s proposed construction of the phrase “predetermined scheduled arrival time” is consistent with the plain and ordinary meaning of the phrase as well as the specification of the ‘318 patent.

7. “permitting the party to define one or more preferences criteria”

ArrivalStar proposes that the phrase “permitting the party to define one or more preferences criteria” be construed to mean “*allowing the user to select one or more conditions.*”

This proposed construction is supported by the plain and ordinary meaning of the phrases. Defendants’ proposed construction – “[t]o make possible for a user to identify either a geographic location or a specific point in time in relation to a vehicle stop and associated with the future travel of a vehicle” (Ex. C, Joint Claim Terms/Phrases Chart at 43-44) – unnecessarily limits the disputed phrase to certain types of preferences – namely, preferences relating to “either a geographic location or a specific point in time.” In this regard, Defendants’ proposed construction violates the basic tenet of patent claim construction that limitations of disclosed embodiments cannot be read into a claim.

The unnecessarily narrow construction proposed by Defendants not only seeks to limit the disputed phrase to two embodiments disclosed in the ‘318 patent, but it further ignores other embodiments that broaden the definition of the phrase. Specifically, dependent claim 23 of the ‘318 patent defines, as an additional element to the steps of independent method claim 1, a “message [that] indicates that the vehicle is delayed and thus will not arrive at a predetermined scheduled arrival time.” (Ex. A, ‘318 patent, col. 39, ll. 16-18.) It reasonably follows, then, that a party’s defined “preferences criteria” can include a choice to be notified when a vehicle is delayed. ArrivalStar’s less-limiting proposed construction is supported by the claim language and the specification of the ‘318 patent.

8. “notification” (as used in the ‘318 and ‘359 patents)

ArrivalStar proposes that the term “notification” be construed to mean “*something by which notice is given.*” Defendants’ proposed construction for the phrase is: “[m]essage specifying a time of arrival, distance before arriving or geographic location of a vehicle.” (Ex. C, Joint Claim Terms/Phrases Chart at 94). In considering Defendants’ proposed construction, ArrivalStar is willing to agree that the term “notification” should be construed to mean a “message,” but is unwilling, for the reasons in Section IV(A)(5) above, to agree to the additional

unnecessary limitations proposed by Defendants. As discussed, *supra*, dependent claim 23 and the specification of the '318 patent provide examples of notifications (i.e., "messages") "indicat[ing] that the vehicle is delayed and thus will not arrive at a predetermined scheduled arrival time." (Ex. A, '318 patent, col. 39, ll. 16-18.) Contrary to Defendants' proposed limited construction for the term "notification," the term need not be limited to information specifying "a time of arrival, distance before arriving or geographic location of a vehicle."

ArrivalStar proposes that the term "notification" as used in the '318 and '359 patents be construed to have the same meaning as "message" as construed above.

9. "means for monitoring travel data corresponding to a vehicle at a computer system"

The phrase "means for monitoring travel data corresponding to a vehicle at a computer system" is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is "*to monitor travel data corresponding to a vehicle at a computer system.*" The structure, act, or material corresponding to this element is:

1. A "base station control unit ((BSCU)" (Ex. A, '318 patent, col. 10, line 54), which is defined as being "any convention computer with suitable processing capabilities" (id., col. 14, ll. 42-43), and which is configured to communicate with a number of "vehicle control units (VCU)" (id., col. 10 line 53) and "user computers ... and/or ... additional communication devices" (id., ll. 55-56). As depicted in Figure 2 of the '318 patent, "additional communications devices" can include, among other things, a "person's pager" and a "person's mobile phone." (Ex. A, '318 patent, Fig. 2.) In simple configurations, as depicted in Figures 9 and 10 of the '319 patent, the VCU does not include a GPS system, but instead merely includes a package tracking system that includes "user input controls

(UIC)” (Ex. A, ‘318 patent, Figs. 9-10), which UICs are defined as including, among other things “bar code readers” (id.) and “hand held remote data entry device[s] ... for the purpose of relaying messages to the BSCU” relating to a vehicle’s location (Ex. A, ‘318 patent, col. col. 3, ll. 29-30).

2. A cellular and/or wireless communications interface between the BSCU and the VCUs including “cellular transceiver[s] [for] wireless communication” in the VCUs and a “wireless transceiver [for] vehicle communication.” (See, e.g., Ex. A, ‘318 patent, Figs. 9-10, and items 18a and 26, in particular.)
3. A “link” between the BSCU and a person’s computer or “additional communications device” over a computer network. (See, e.g., Ex. A, ‘318 patent, Fig. 2, item 29; Figs. 7, 10, items 14, 36.) The link between the BSCU and a person’s computer can be accomplished by use of “networking software provided by commercial Internet access providers with electronic messaging (E-Mail) capabilities, [which] provides an easy method for a person wanting impending vehicle 19 arrival information on their computer screen without adding proprietary software associated with an advance notification system 10.” (Ex. A, ‘318 patent, col. 15, ll. 58-64.)
4. “[A] Vehicle Location Data Base (VLDB) 14a for storing vehicle location data.” (Ex. A, ‘318 patent, col. 15, ll. 43-44; Figs. 7, 10.)
5. “[A] Notification Data Base (NDB) 14c for activating an impending arrival message from a User Request Data Base (URDB) 14d.” (Ex. A, ‘318 patent, col. 15, ll. 46-48; Figs. 7, 10.)

6. “[A] User Request Data Base (URDB),” which “stores each person's phone number/s, computer address, preferences for notification, package information, stopping deliveries when out of town, etc.” (Ex. A, '318 patent, col. 15, ll. 48-51; Figs. 7, 10.)
7. A software process such as that depicted in Figure 5 of the '318 patent in which the location of a vehicle is compared to the “data base of user requests.” (See, e.g., Ex. A, '318 patent, Fig. 5.)

Based on the computer systems, hardware and software processes disclosed in the specification of the '318 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

10. **“means for, based upon the travel data and in advance of the vehicle's arrival at the vehicle stop, communicating a message from the computer system to a remote, portable, computer-based, personal, communications device transported by the user and that is remote from the vehicle stop to indicate impending arrival of the vehicle at the vehicle stop”**

The phrase “means for, based upon the travel data and in advance of the vehicle's arrival at the vehicle stop, communicating a message from the computer system to a remote, portable, computer-based, personal, communications device transported by the user and that is remote from the vehicle stop to indicate impending arrival of the vehicle at the vehicle stop” is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is *“to communicate a message from the computer system to a remote, portable, computer-based, personal, communications device transported by the user and that is remote from the vehicle stop to indicate impending arrival of the vehicle at the vehicle stop.”* The structure, act, or material corresponding to this element is the system described in Section IV(A)(9) above as it applies to communications from the BSCU to a “person’s pager,” a “person’s mobile phone,” or

a person's portable computer (Ex. A, '318 patent, Fig. 2), including the additional software process of sending a message to the user's portable "computer[] ... and/or ... additional communication device[]" as depicted in Figure 5 of the '318 patent. (See also, Ex. A, '318 patent, Figs. 3, 7, 10.)

Based on the computer systems, hardware and software processes disclosed in the specification of the '318 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

11. "means for receiving an email address"

The phrase "means for receiving an email address" is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is "*to receive an email address.*" The structure, act, or material corresponding to this element is the "User Request Data Base (URDB)," which resides on the BSCU and "stores each person's phone number/s, computer address, preferences for notification, package information, stopping deliveries when out of town, etc" (Ex. A,'318 patent, col. 15, ll. 48-51; Figs. 7, 10), the communications/network interface between the user's communication device and the BSCU as described above, and the input device of a user's communication device (e.g., a keyboard, mouse or trackball). The structure for performing this function may further include an Internet or network based webpage-type interface with which a user may enter user-specific data into the User Request Data Base. (See, e.g., Ex. A., '318 patent, Figs. 29-39.)

Based on the computer systems, hardware and software processes disclosed in the specification of the '318 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

12. “means for storing the email address”

The phrase “means for storing the email address” is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is “*to store an email address.*” The structure, act, or material corresponding to this element is the “User Request Data Base (URDB),” which resides on the BSCU and “stores each person's phone number/s, computer address, preferences for notification, package information, stopping deliveries when out of town, etc” (Ex. A, '318 patent, col. 15, ll. 48-51; Figs. 7, 10).

Based on the computer systems, hardware and software processes disclosed in the specification of the '318 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

13. “means for causing the message to be communicated to the stored email address”

The phrase “means for causing the message to be communicated to the stored email address” is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is “*to cause a message to be communicated to the stored email address.*” The structure, act, or material corresponding to this element is the system described in Section IV(A)(9) above as it applies to communications from the BSCU to a “person’s pager,” a “person’s mobile phone,” or a person’s portable computer (Ex. A, '318 patent, Fig. 2), including the additional software process of sending a message to the user’s portable “computer[] ... and/or ... additional communication device[]” as depicted in Figure 5 of the '318 patent. (See also, Ex. A, '318 patent, Figs. 3, 7, 10.)

Based on the computer systems, hardware and software processes disclosed in the specification of the '318 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

14. “means for permitting a party to establish a communication session with the computer system”

The phrase “means for permitting a party to establish a communication session with the computer system” is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is “*to permit a party to establish a communication session with the computer system.*” The structure, act, or material corresponding to this element is the “User Request Data Base (URDB),” which resides on the BSCU and “stores each person's phone number/s, computer address, preferences for notification, package information, stopping deliveries when out of town, etc” (Ex. A, '318 patent, col. 15, ll. 48-51; Figs. 7, 10), the communications/network interface between the user's communication device and the BSCU as described above, and the input device of a user's communication device (e.g., a keyboard, mouse or trackball). The structure for performing this function may further include an Internet or network based webpage-type interface with which a user may enter user-specific data into the User Request Data Base. (See, e.g., Ex. A., '318 patent, Figs. 29-39.)

Based on the computer systems, hardware and software processes disclosed in the specification of the '318 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

15. “means for permitting the party to define one or more preferences criteria that, once met, will cause initiation of the communication of the message”

The phrase “means for permitting the party to define one or more preferences criteria that, once met, will cause initiation of the communication of the message” is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is “*to permit a party to define one or more preferences criteria that, once met, will cause initiation of the communication of the message.*” The structure, act, or material corresponding to this

element is the “User Request Data Base (URDB),” which resides on the BSCU and “stores each person's phone number/s, computer address, preferences for notification, package information, stopping deliveries when out of town, etc” (Ex. A, '318 patent, col. 15, ll. 48-51; Figs. 7, 10), the communications/network interface between the user's communication device and the BSCU as described above, and the input device of a user's communication device (e.g., a keyboard, mouse or trackball). The structure for performing this function may further include an Internet or network based webpage-type interface with which a user may enter user-specific data into the User Request Data Base. (See, e.g., Ex. A., '318 patent, Figs. 29-39.)

Based on the computer systems, hardware and software processes disclosed in the specification of the '318 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

16. **“means for, based upon the travel data and in advance of the vehicle's arrival at the vehicle stop, communicating messages from the computer system to a plurality of remote personal communications devices transported by a plurality of users to indicate impending arrival of the vehicle at the vehicle stop, the plurality of remote personal communications devices residing at different locations that are remote from the vehicle stop”**

The phrase “means for, based upon the travel data and in advance of the vehicle's arrival at the vehicle stop, communicating messages from the computer system to a plurality of remote personal communications devices transported by a plurality of users to indicate impending arrival of the vehicle at the vehicle stop, the plurality of remote personal communications devices residing at different locations that are remote from the vehicle stop” is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is “*to, based upon the travel data and in advance of the vehicle's arrival at the vehicle stop, communicate messages from the computer system to a plurality of remote personal*

communications devices transported by a plurality of users to indicate impending arrival of the vehicle at the vehicle stop, where the plurality of remote personal communications devices reside at different locations that are remote from the vehicle stop.”

The structure, act, or material corresponding to this element is the system described in Section IV(A)(9) above as it applies to communications from the BSCU to a “person’s pager,” a “person’s mobile phone,” or a person’s portable computer (Ex. A, ‘318 patent, Fig. 2), including the additional software process of sending a message to the user’s portable “computer[] ... and/or ... additional communication device[]” as depicted in Figure 5 of the ‘318 patent. (See also, Ex. A, ‘318 patent, Figs. 3, 7, 10.) Further, the process of communicating electronic messages, such as e-mails, to a plurality of users as opposed to just a single user is disclosed and suggested in Figure 2 of the ‘318 patent, and, in any event, has been well-known in the art for several years.

Based on the computer systems, hardware and software processes disclosed in the specification of the ‘318 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

17. **“means for, based upon the travel data and in advance of the vehicle's arrival at the vehicle stop, communicating a message from the computer system to a remote general-purpose computer-based communications device associated with the user and that is remote from the vehicle stop to indicate impending arrival of the vehicle at the vehicle stop, the general-purpose computer-based communications device being designed to communicate with other communications devices that are undedicated to the computer system”**

The phrase “means for, based upon the travel data and in advance of the vehicle's arrival at the vehicle stop, communicating a message from the computer system to a remote general-purpose computer-based communications device associated with the user and that is remote from

the vehicle stop to indicate impending arrival of the vehicle at the vehicle stop, the general-purpose computer-based communications device being designed to communicate with other communications devices that are undedicated to the computer system” is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is “*to, based upon the travel data and in advance of the vehicle's arrival at the vehicle stop, communicate a message from the computer system to a remote general-purpose computer-based communications device associated with the user and that is remote from the vehicle stop to indicate impending arrival of the vehicle at the vehicle stop, where the general-purpose computer-based communications device is designed to communicate with other communications devices that are undedicated to the computer system.*”

The structure, act, or material corresponding to this element is the system described in Section IV(A)(9) above as it applies to communications from the BSCU to “user computers” (Ex. A, ‘318 patent, line 55), including the additional software process of sending a message to the user’s computer as depicted in Figure 5 of the ‘318 patent. (See also, Ex. A, ‘318 patent, Figs. 3, 7, 10.)

Based on the computer systems, hardware and software processes disclosed in the specification of the ‘318 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

B. THE ‘359 PATENT

ArrivalStar offers the following constructions for the disputed claim terms and phrases of the ‘359 patent.

1. “to predefine”

ArrivalStar proposes that the phrase “to predefine” be construed to mean “*prespecify.*” Defendants propose that this phrase be construed to mean “[t]o initially set the conditions for.”

(Ex. C, Joint Claim Terms/Phrases Chart at 70.) To eliminate areas of disagreement between the parties and streamline the claim construction process, ArrivalStar will agree to Defendants' proposed construction for this term.

2. “distance information specified by the user that is indicative of the distance between the vehicle and the location”

ArrivalStar proposes that the phrase “distance information specified by the user that is indicative of the distance between the vehicle and the location” be construed to mean “*distance information identified by the user relating to the distance between the vehicle and a location.*”

Defendants proposed that this phrase be construed to mean “[a] non-zero number input by the user defining a distance separating a vehicle and a location.” (Ex. C, Joint Claim Terms/Phrases Chart at 70.) To eliminate areas of disagreement between the parties and streamline the claim construction process, ArrivalStar will agree to Defendants' proposed construction for this term.

3. “location information specified by the user that is indicative a location or region that the vehicle achieves during travel”

ArrivalStar proposes that the phrase “location information specified by the user that is indicative a location or region that the vehicle achieves during travel” be construed to mean “*location information identified by the user relating to a location or region that the vehicle achieves during travel.*” Defendants proposed construction for this phrase – “[a] perimeter, street marker, stop on a route, or latitude/longitude input by the user defining a location that a vehicle achieves during travel prior to arriving at the location” (Ex. C, Joint Claim Terms/Phrases Chart at 83) – is too narrow because it improperly (and selectively) imposes limitations from disclosed embodiments of the invention of the '359 patent into the claims.

As discussed above, in addition to the limited examples provided in Defendants' proposed construction, the specification of the '359 patent also provides specific examples of

notifications that simply inform the user that a delivery vehicle has arrived at the *user's* stop. (Ex. B, '359 patent, Fig. 18, providing flowchart including the following steps: (1) "HAS VEHICLE ARRIVED AT STOP?"; (2) if "YES," then (3) "**SEND MESSAGE OF VEHICLE'S ARRIVAL,**" which message reads "THE XYZ DELIVERY COMPANY TRUCK **HAS ARRIVED** AT YOU[R] STOP" (emphasis added).) Similarly, the specification of the '359 patent discloses an embodiment of the invention in which a user is notified that a delivery attempt at the user's stop was made.

In the event that the vehicle driver has not delivered a package, and an attempt was made, and normally when the driver is not repeating the stop in a given day, the driver can activate an attempt to deliver switch 21 to inform the BSCU 14 to cancel this user stop from a list, and *send a second message of the time of attempted delivery and package information to the user computer.*

(Ex. B, '359 patent, col. 32, ll. 24-30 (emphasis added).) In light of these examples, "location information specified by the user that is indicative a location or region that the vehicle achieves during travel" should be construed to mean "*information identified by the user relating to a location or region that the vehicle achieves during travel,*" which "information ... relating to a location" can simply be the user's specification of a package's delivery or delivery attempt – information about either informs the user of a location that the delivery vehicle has achieved during travel.

In light of the '359 patent's specific disclosure of arrival and delivery attempt notifications, Defendants' proposed limitation that this phrase relate to a location a vehicle achieves "prior to arriving at the location" is improper. Further, this added limitation is unnecessary in light of the use of the phrase "prior to arriving at the location" within a separate element of claim 1 of the '359 patent. (See "a number of one or more stops" claim element as discussed in Section IV(B)(5) below.) If the inventor had intended to impose the same limitation

on the “location information” element, he would have included the “prior to arriving at the location” language in such element.

4. “time information specified user that is indicative of a time for travel of the vehicle to the location”

ArrivalStar proposes that the phrase “time information specified user that is indicative of a time for travel of the vehicle to the location” be construed to mean “*time information identified by the user relating to a time for travel of the vehicle to the location.*” Defendants’ proposed construction for this phrase is “[a] non-zero number input by the user defining an amount of time prior to arrival of the vehicle at the location.” (Ex. C, Joint Claim Terms/Phrases Chart at 88.) To eliminate areas of disagreement between the parties and streamline the claim construction process, ArrivalStar will agree to Defendants’ proposed construction for this term.

5. “a number of one or more stops that the vehicle accomplishes prior to arriving at the location”

ArrivalStar proposes that the phrase “a number of one or more stops that the vehicle accomplishes prior to arriving at the location” be construed to mean “*a number of one or more stops that the vehicle reaches prior to arriving at the location.*” Defendants’ proposed construction for this phrase is “[a] non-zero number input by the user defining the number of stops on a predetermined route prior to arrival of the vehicle at the location.” (Ex. C, Joint Claim Terms/Phrases Chart at 91.) To eliminate areas of disagreement between the parties and streamline the claim construction process, ArrivalStar will agree to the following proposed modification to Defendants’ proposed construction for this term: “[a] *non-zero number input by the user defining the number of stops the vehicle makes prior to arrival of the vehicle at the location.*”

6. “when appropriate”

ArrivalStar proposes that the phrase “when appropriate” does not require construction.

Defendants’ proposed construction for this phrase is:

When the status of a mobile vehicle in relation to a location is a particular time period (for example a number of minutes or seconds) away from arriving at a destination; a particular distance (for example a number of miles or height) away from the destination; or at a particular location among a set of location points prior to the destination.

(Ex. C, Joint Claim Terms/Phrases Chart at 99.) In addition to imposing unnecessary and selective limitations from the specification into the claims of the ‘359 patent, the phrase “when appropriate” is self-defining in the context of claim 1 and the other claims of the patent. Specifically, as in the context of claim 1, the phrase simply means “when the user’s predefined one or more events have occurred.”

If the Court is persuaded that this phrase does require construction, ArrivalStar submits that such construction should be consistent with, and made in light of, ArrivalStar’s proposed constructions for the user’s “predefine[d] one or more events” as discussed in Sections IV(B)(2)-(5) above.

7. “the status of a mobile vehicle in relation to a location”

Upon reconsideration, ArrivalStar proposes that the phrase “the status of a mobile vehicle in relation to a location” does not require construction, but that the phrase, instead, is self-defining in light of the language of claim 19 of the ‘359 patent. Specifically, claim 19 includes the following definition of the disputed phrase:

[P]ermitting a user to predefine one or more events that will cause creation and communication of a notification relating to *the status of a mobile vehicle in relation to a location*, by the following steps....

[R]eceiving at the notification system during the first communication link *an identification of the one or more events relating to the status of the vehicle, wherein the one or more events comprises at least one of the following*: distance

information specified by the user that is indicative of a distance between the vehicle and the location, location information specified by the user that is indicative of a location or region that the vehicle achieves during travel, time information specified by the user that is indicative of a time for travel of the vehicle to the location, or a number of one or more stops that the vehicle accomplishes prior to arriving at the location....

(Ex. B, '359 patent, col. 36, ll. 44-47, 48-60 (emphasis added).) Thus, the “status of a mobile vehicle in relation to a location” is defined in terms of information relating to the four “events” for which ArrivalStar has already proposed constructions in Sections IV(B)(2)-(5) above.

If the Court is persuaded that this phrase does require construction, ArrivalStar submits that such construction should be consistent with, and made in light of, ArrivalStar’s proposed constructions for the user’s “predefine[d] one or more events” as discussed in Sections IV(B)(2)-(5) above.

8. “analyze data indicative of travel”

ArrivalStar proposes that the phrase “analyze data indicative of travel” be construed to mean “analyzing data relating to travel of the mobile vehicle.” Defendants’ proposed construction for this phrase – “[c]omparing actual vehicle location in relation to scheduled vehicle location” (Ex. C, Joint Claim Terms/Phrases Chart at 115) – is too narrow and limiting, and is inconsistent with what is disclosed in the ‘359 patent. By way of one of many examples, Defendants’ proposed construction requires comparison of actual vehicle location to scheduled vehicle location. However, as discussed, the ‘359 patent describes embodiments of the invention in which users are sent notifications that a delivery vehicle has merely arrived at a user’s location and either made a delivery or attempted to make a delivery. (See, e.g., discussion concerning arrival and delivery attempt notifications in Section IV(B)(3) above.) In such instances, the only analysis that must be performed involves comparing the actual location of a vehicle with a

predefined event selected by the user the occurrence of which event will cause a notification to be sent.

Thus, limiting this phrase to only encompass instances in which a comparison is made between actual vehicle location and a *scheduled* vehicle location is improper. On the other hand, ArrivalStar's proposed construction is consistent with what is disclosed in the '359 patent.

9. “means for permitting the user to predefine one or more events that will cause creation and communication of the vehicle status report”

The phrase “means for permitting the user to predefine one or more events that will cause creation and communication of the vehicle status report” is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is “*to permit the user to predefine one or more events that will cause creation and communication of the vehicle status report.*” The structure, act, or material corresponding to this element is the “User Request Data Base (URDB),” which resides on the BSCU and “stores each person's phone number/s, computer address, preferences for notification, package information, stopping deliveries when out of town, etc” (Ex. A, '318 patent, col. 15, ll. 48-51; Figs. 7, 10 (the relevant portions of the specification of the '359 are identical to those of the '359 patent – for the sake of convenience, ArrivalStar's citations will be to the specification of the '318 patent), the communications/network interface between the user's communication device and the BSCU as described above, and the input device of a user's communication device (e.g., a keyboard, mouse or trackball). The structure for performing this function may further include an Internet or network based webpage-type interface with which a user may enter user-specific data into the User Request Data Base. (See, e.g., Ex. A., '318 patent, Figs. 29-39.)

Based on the computer systems, hardware and software processes disclosed in the specification of the '359 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

10. “means for permitting the user to establish a communication link with a host computer system using a user communications device that is remote from the host computer”

The phrase “means for permitting the user to establish a communication link with a host computer system using a user communications device that is remote from the host computer” is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is “*to permit the user to establish a communication link with a host computer system using a user communications device that is remote from the host computer.*” The structure, act, or material corresponding to this element is the “User Request Data Base (URDB),” which resides on the BSCU and “stores each person's phone number/s, computer address, preferences for notification, package information, stopping deliveries when out of town, etc” (Ex. A, '318 patent, col. 15, ll. 48-51; Figs. 7, 10), the communications/network interface between the user's communication device and the BSCU as described above, and the input device of a user's communication device (e.g., a keyboard, mouse or trackball). The structure for performing this function may further include an Internet or network based webpage-type interface with which a user may enter user-specific data into the User Request Data Base. (See, e.g., Ex. A., '318 patent, Figs. 29-39.)

Based on the computer systems, hardware and software processes disclosed in the specification of the '359 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

11. **“means for receiving during the first communication link at the host computer system an identification of the one or more events relating to the status of the vehicle, wherein the one or more events comprises at least one of the following: distance information specified by the user that is indicative of a distance between the vehicle and the location, location information specified by the user that is indicative of a location or region that the vehicle achieves during travel, time information specified by the user that is indicative of a time for travel of the vehicle to the location, or a number of one or more stops that the vehicle accomplishes prior to arriving at the location”**

The phrase “means for receiving during the first communication link at the host computer system an identification of the one or more events relating to the status of the vehicle, wherein the one or more events comprises at least one of the following: distance information specified by the user that is indicative of a distance between the vehicle and the location, location information specified by the user that is indicative of a location or region that the vehicle achieves during travel, time information specified by the user that is indicative of a time for travel of the vehicle to the location, or a number of one or more stops that the vehicle accomplishes prior to arriving at the location” is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is *“to receive during the first communication link at the host computer system an identification of the one or more events relating to the status of the vehicle, wherein the one or more events comprises at least one of the following: distance information specified by the user that is indicative of a distance between the vehicle and the location, location information specified by the user that is indicative of a location or region that the vehicle achieves during travel, time information specified by the user that is indicative of a time for travel of the vehicle to the location, or a number of one or more stops that the vehicle accomplishes prior to arriving at the location.”*

The structure, act, or material corresponding to this element is the “User Request Data Base (URDB),” which resides on the BSCU and “stores each person's phone number/s, computer address, preferences for notification, package information, stopping deliveries when out of town, etc” (Ex. A, '318 patent, col. 15, ll. 48-51; Figs. 7, 10), the communications/network interface between the user’s communication device and the BSCU as described above, and the input device of a user’s communication device (e.g., a keyboard, mouse or trackball). The structure for performing this function may further include an Internet or network based webpage-type interface with which a user may enter user-specific data into the User Request Data Base. (See, e.g., Ex. A., '318 patent, Figs. 29-39.)

Based on the computer systems, hardware and software processes disclosed in the specification of the '359 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

12. “means for storing the predefined one or more events in memory associated with the host computer system”

The phrase “means for storing the predefined one or more events in memory associated with the host computer system” is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is “*to store the predefined one or more events in memory associated with the host computer system.*” The structure, act, or material corresponding to this element is the “User Request Data Base (URDB),” which resides on the BSCU and “stores each person's phone number/s, computer address, preferences for notification, package information, stopping deliveries when out of town, etc.” (Ex. A, '318 patent, col. 15, ll. 48-51; Figs. 7, 10).

Based on the computer systems, hardware and software processes disclosed in the specification of the '359 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

13. “means for analyzing data indicative of travel of the mobile vehicle”

The phrase “means for analyzing data indicative of travel of the mobile vehicle” is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is “*to analyze data indicative of travel of the mobile vehicle.*” The structure, act, or material corresponding to this element is:

1. A “base station control unit ((BSCU)” (Ex. A, '318 patent, col. 10, line 54), which is defined as being “any convention computer with suitable processing capabilities” (id., col. 14, ll. 42-43), and which is configured to communicate with a number of “vehicle control units (VCU)” (id., col. 10 line 53) and “user computers ... and/or ... additional communication devices” (id., ll. 55-56). As depicted in Figure 2 of the '318 patent, “additional communications devices” can include, among other things, a “person’s pager” and a “person’s mobile phone.” (Ex. A, '318 patent, Fig. 2.) In simple configurations, as depicted in Figures 9 and 10 of the '319 patent, the VCU does not include a GPS system, but instead merely includes a package tracking system that includes “user input controls (UIC)” (Ex. A, '318 patent, Figs. 9-10), which UICs are defined as including, among other things “bar code readers” (id.) and “hand held remote data entry device[s] ... for the purpose of relaying messages to the BSCU” relating to a vehicle’s location (Ex. A, '318 patent, col. col. 3, ll. 29-30).

2. A cellular and/or wireless communications interface between the BSCU and the VCUs including “cellular transceiver[s] [for] wireless communication” in the VCUs and a “wireless transceiver [for] vehicle communication.” (See, e.g., Ex. A, ‘318 patent, Figs. 9-10, and items 18a and 26, in particular.)
3. A “link” between the BSCU and a person’s computer or “additional communications device” over a computer network. (See, e.g., Ex. A, ‘318 patent, Fig. 2, item 29; Figs. 7, 10, items 14, 36.) The link between the BSCU and a person’s computer can be accomplished by use of “networking software provided by commercial Internet access providers with electronic messaging (E-Mail) capabilities, [which] provides an easy method for a person wanting impending vehicle 19 arrival information on their computer screen without adding proprietary software associated with an advance notification system 10.” (Ex. A, ‘318 patent, col. 15, ll. 58-64.)
4. “[A] Vehicle Location Data Base (VLDB) 14a for storing vehicle location data.” (Ex. A, ‘318 patent, col. 15, ll. 43-44; Figs. 7, 10.)
5. “[A] Notification Data Base (NDB) 14c for activating an impending arrival message from a User Request Data Base (URDB) 14d.” (Ex. A, ‘318 patent, col. 15, ll. 46-48; Figs. 7, 10.)
6. “[A] User Request Data Base (URDB),” which “stores each person's phone number/s, computer address, preferences for notification, package information, stopping deliveries when out of town, etc.” (Ex. A, ‘318 patent, col. 15, ll. 48-51; Figs. 7, 10.)

7. A software process such as that depicted in Figure 5 of the '318 patent in which the location of a vehicle is compared to the "data base of user requests." (See, e.g., Ex. A, '318 patent, Fig. 5.)

Based on the computer systems, hardware and software processes disclosed in the specification of the '359 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

14. "means for enabling initialization of communication links from the host computer system to a remote communications device to be notified, when appropriate, based upon the predefined one or more events and data indicative of travel"

The phrase "means for enabling initialization of communication links from the host computer system to a remote communications device to be notified, when appropriate, based upon the predefined one or more events and data indicative of travel" is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is "*to enable initialization of communication links from the host computer system to a remote communications device to be notified, when appropriate, based upon the predefined one or more events and data indicative of travel.*" The structure, act, or material corresponding to this element is the system described in Section IV(A)(9) above as it applies to communications from the BSCU to a "person's pager," a "person's mobile phone," or a person's portable computer (Ex. A, '318 patent, Fig. 2), including the additional software process of sending a message to the user's portable "computer[] ... and/or ... additional communication device[]" as depicted in Figure 5 of the '318 patent. (See also, Ex. A, '318 patent, Figs. 3, 7, 10.)

Based on the computer systems, hardware and software processes disclosed in the specification of the '359 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

15. “means for delivering the status report from the host computer to the notified remote communications device during a second communication link, the status report indicating occurrence of the one or more events”

The phrase “means for delivering the status report from the host computer to the notified remote communications device during a second communication link, the status report indicating occurrence of the one or more events” is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is “*to deliver the status report from the host computer to the notified remote communications device during a second communication link, the status report indicating occurrence of the one or more events.*” The structure, act, or material corresponding to this element is the system described in Section IV(A)(9) above as it applies to communications from the BSCU to a “person’s pager,” a “person’s mobile phone,” or a person’s portable computer (Ex. A, ‘318 patent, Fig. 2), including the additional software process of sending a message to the user’s portable “computer[] ... and/or ... additional communication device[]” as depicted in Figure 5 of the ‘318 patent. (See also, Ex. A, ‘318 patent, Figs. 3, 7, 10.)

Based on the computer systems, hardware and software processes disclosed in the specification of the ‘359 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

16. “means for permitting a user to predefine one or more events that will cause creation and communication of a notification relating to the status of a mobile vehicle in relation to a location”

The phrase “means for permitting a user to predefine one or more events that will cause creation and communication of a notification relating to the status of a mobile vehicle in relation to a location” is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is “*to permit a user to predefine one or more events that will cause*

creation and communication of a notification relating to the status of a mobile vehicle in relation to a location.” The structure, act, or material corresponding to this element is the “User Request Data Base (URDB),” which resides on the BSCU and “stores each person's phone number/s, computer address, preferences for notification, package information, stopping deliveries when out of town, etc” (Ex. A, '318 patent, col. 15, ll. 48-51; Figs. 7, 10), the communications/network interface between the user's communication device and the BSCU as described above, and the input device of a user's communication device (e.g., a keyboard, mouse or trackball). The structure for performing this function may further include an Internet or network based webpage-type interface with which a user may enter user-specific data into the User Request Data Base. (See, e.g., Ex. A., '318 patent, Figs. 29-39.)

Based on the computer systems, hardware and software processes disclosed in the specification of the '359 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

17. “means for permitting the user to electronically communicate during a first communication link with the notification system from a user communications device that is remote from the notification system”

The phrase “means for permitting the user to electronically communicate during a first communication link with the notification system from a user communications device that is remote from the notification system” is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is *“to permit the user to electronically communicate during a first communication link with the notification system from a user communications device that is remote from the notification system.”* The structure, act, or material corresponding to this element is the “User Request Data Base (URDB),” which resides on the BSCU and “stores each person's phone number/s, computer address, preferences for

notification, package information, stopping deliveries when out of town, etc” (Ex. A, ’318 patent, col. 15, ll. 48-51; Figs. 7, 10), the communications/network interface between the user’s communication device and the BSCU as described above, and the input device of a user’s communication device (e.g., a keyboard, mouse or trackball). The structure for performing this function may further include an Internet or network based webpage-type interface with which a user may enter user-specific data into the User Request Data Base. (See, e.g., Ex. A., ’318 patent, Figs. 29-39.)

Based on the computer systems, hardware and software processes disclosed in the specification of the ’359 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

- 18. “means for receiving during the first communication link an identification of the one or more events relating to the status of the vehicle, wherein the one or more events comprises at least one of the following: distance information specified by the user that is indicative of a distance between the vehicle and the location, location information specified by the user that is indicative of a location or region that the vehicle achieves during travel, time information specified by the user that is indicative of a time for travel of the vehicle to the location, or a number of one or more stops that the vehicle accomplishes prior to arriving at the location”**

The phrase “means for receiving during the first communication link an identification of the one or more events relating to the status of the vehicle, wherein the one or more events comprises at least one of the following: distance information specified by the user that is indicative of a distance between the vehicle and the location, location information specified by the user that is indicative of a location or region that the vehicle achieves during travel, time information specified by the user that is indicative of a time for travel of the vehicle to the location, or a number of one or more stops that the vehicle accomplishes prior to arriving at the

location” is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is *“to receive during the first communication link an identification of the one or more events relating to the status of the vehicle, wherein the one or more events comprises at least one of the following: distance information specified by the user that is indicative of a distance between the vehicle and the location, location information specified by the user that is indicative of a location or region that the vehicle achieves during travel, time information specified by the user that is indicative of a time for travel of the vehicle to the location, or a number of one or more stops that the vehicle accomplishes prior to arriving at the location.”*

The structure, act, or material corresponding to this element is the “User Request Data Base (URDB),” which resides on the BSCU and “stores each person's phone number/s, computer address, preferences for notification, package information, stopping deliveries when out of town, etc” (Ex. A, '318 patent, col. 15, ll. 48-51; Figs. 7, 10), the communications/network interface between the user’s communication device and the BSCU as described above, and the input device of a user’s communication device (e.g., a keyboard, mouse or trackball). The structure for performing this function may further include an Internet or network based webpage-type interface with which a user may enter user-specific data into the User Request Data Base. (See, e.g., Ex. A., '318 patent, Figs. 29-39.)

Based on the computer systems, hardware and software processes disclosed in the specification of the '359 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

19. “means for establishing a second communication link between the system and the user upon occurrence of the one or more events”

The phrase “means for establishing a second communication link between the system and the user upon occurrence of the one or more events” is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is “*to establishing a second communication link between the system and the user upon occurrence of the one or more events.*” The structure, act, or material corresponding to this element is the system described in Section IV(A)(9) above as it applies to communications from the BSCU to a “person’s pager,” a “person’s mobile phone,” or a person’s portable computer (Ex. A, ‘318 patent, Fig. 2), including the additional software process of sending a message to the user’s portable “computer[] ... and/or ... additional communication device[]” as depicted in Figure 5 of the ‘318 patent. (See also, Ex. A, ‘318 patent, Figs. 3, 7, 10.)

Based on the computer systems, hardware and software processes disclosed in the specification of the ‘359 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

20. “means for permitting a user to predefine at a computer system one or more events that will cause communication of a notification relating to the status of a mobile vehicle, wherein the one or more events comprises at least one of the following: distance information specified by the user that is indicative of a distance between the vehicle and the location, location information specified by the user that is indicative of a location or region that the vehicle achieves during travel, time information specified by the user that is indicative of a time for travel of the vehicle to the location, or a number of one or more stops that the vehicle accomplishes prior to arriving at the location”

The phrase “means for permitting a user to predefine at a computer system one or more events that will cause communication of a notification relating to the status of a mobile vehicle,

wherein the one or more events comprises at least one of the following: distance information specified by the user that is indicative of a distance between the vehicle and the location, location information specified by the user that is indicative of a location or region that the vehicle achieves during travel, time information specified by the user that is indicative of a time for travel of the vehicle to the location, or a number of one or more stops that the vehicle accomplishes prior to arriving at the location” is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is *“to permit a user to predefine at a computer system one or more events that will cause communication of a notification relating to the status of a mobile vehicle, wherein the one or more events comprises at least one of the following: distance information specified by the user that is indicative of a distance between the vehicle and the location, location information specified by the user that is indicative of a location or region that the vehicle achieves during travel, time information specified by the user that is indicative of a time for travel of the vehicle to the location, or a number of one or more stops that the vehicle accomplishes prior to arriving at the location.”*

The structure, act, or material corresponding to this element is the “User Request Data Base (URDB),” which resides on the BSCU and “stores each person's phone number/s, computer address, preferences for notification, package information, stopping deliveries when out of town, etc” (Ex. A, '318 patent, col. 15, ll. 48-51; Figs. 7, 10), the communications/network interface between the user's communication device and the BSCU as described above, and the input device of a user's communication device (e.g., a keyboard, mouse or trackball). The structure for performing this function may further include an Internet or network based webpage-type interface with which a user may enter user-specific data into the User Request Data Base. (See, e.g., Ex. A., '318 patent, Figs. 29-39.)

Based on the computer systems, hardware and software processes disclosed in the specification of the '359 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

21. “means for tracking movement of the vehicle as it moves toward the location”

The phrase “means for tracking movement of the vehicle as it moves toward the location” is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is “*to track movement of the vehicle as it moves toward the location.*” The structure, act, or material corresponding to this element is:

1. A “base station control unit ((BSCU)” (Ex. A, '318 patent, col. 10, line 54), which is defined as being “any convention computer with suitable processing capabilities” (id., col. 14, ll. 42-43), and which is configured to communicate with a number of “vehicle control units (VCU)” (id., col. 10 line 53) and “user computers ... and/or ... additional communication devices” (id., ll. 55-56). As depicted in Figure 2 of the '318 patent, “additional communications devices” can include, among other things, a “person’s pager” and a “person’s mobile phone.” (Ex. A, '318 patent, Fig. 2.) In simple configurations, as depicted in Figures 9 and 10 of the '319 patent, the VCU does not include a GPS system, but instead merely includes a package tracking system that includes “user input controls (UIC)” (Ex. A, '318 patent, Figs. 9-10), which UICs are defined as including, among other things “bar code readers” (id.) and “hand held remote data entry device[s] ... for the purpose of relaying messages to the BSCU” relating to a vehicle’s location (Ex. A, '318 patent, col. col. 3, ll. 29-30).

2. A cellular and/or wireless communications interface between the BSCU and the VCUs including “cellular transceiver[s] [for] wireless communication” in the VCUs and a “wireless transceiver [for] vehicle communication.” (See, e.g., Ex. A, ‘318 patent, Figs. 9-10, and items 18a and 26, in particular.)
3. A “link” between the BSCU and a person’s computer or “additional communications device” over a computer network. (See, e.g., Ex. A, ‘318 patent, Fig. 2, item 29; Figs. 7, 10, items 14, 36.) The link between the BSCU and a person’s computer can be accomplished by use of “networking software provided by commercial Internet access providers with electronic messaging (E-Mail) capabilities, [which] provides an easy method for a person wanting impending vehicle 19 arrival information on their computer screen without adding proprietary software associated with an advance notification system 10.” (Ex. A, ‘318 patent, col. 15, ll. 58-64.)
4. “[A] Vehicle Location Data Base (VLDB) 14a for storing vehicle location data.” (Ex. A, ‘318 patent, col. 15, ll. 43-44; Figs. 7, 10.)
5. “[A] Notification Data Base (NDB) 14c for activating an impending arrival message from a User Request Data Base (URDB) 14d.” (Ex. A, ‘318 patent, col. 15, ll. 46-48; Figs. 7, 10.)
6. “[A] User Request Data Base (URDB),” which “stores each person's phone number/s, computer address, preferences for notification, package information, stopping deliveries when out of town, etc.” (Ex. A, ‘318 patent, col. 15, ll. 48-51; Figs. 7, 10.)

7. A software process such as that depicted in Figure 5 of the '318 patent in which the location of a vehicle is compared to the "data base of user requests." (See, e.g., Ex. A, '318 patent, Fig. 5.)

Based on the computer systems, hardware and software processes disclosed in the specification of the '359 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

22. "means for communicating a notification from the computer system to a user communication device upon occurrence of the one or more events"

The phrase "means for communicating a notification from the computer system to a user communication device upon occurrence of the one or more events" is a means-plus-function element governed by 35 U.S. C. §112(6). The claimed function of this element is "*to communicate a notification from the computer system to a user communication device upon occurrence of the one or more events.*" The structure, act, or material corresponding to this element is the system described in Section IV(A)(9) above as it applies to communications from the BSCU to a "person's pager," a "person's mobile phone," or a person's portable computer (Ex. A, '318 patent, Fig. 2), including the additional software process of sending a message to the user's portable "computer[] ... and/or ... additional communication device[]" as depicted in Figure 5 of the '318 patent. (See also, Ex. A, '318 patent, Figs. 3, 7, 10.)

Based on the computer systems, hardware and software processes disclosed in the specification of the '359 patent as described above, one of ordinary skill in the relevant art could easily perform the disclosed function of this element.

V. CONCLUSION

For the forgoing reasons, ArrivalStar respectfully requests that the Court adopt ArrivalStar's proposed constructions of the disputed terms and phrases in this action.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that a true and accurate copy of **PLAINTIFFS' OPENING CLAIM CONSTRUCTION BRIEF** was served upon all counsel of record via electronic filing or U.S. Mail, first-class postage prepaid, on April 3, 2008.

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