IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

CARMA TECHNOLOGY, CORP. *and* CARMA TECHNOLOGY, LTD., *Plaintiffs*,	§	
v.	§	CASE NO. 2:25-CV-00029-JRG-RSP
UBER TECHNOLOGIES, INC., UBER FREIGHT HOLDING CORPORATION, *and* UBER FREIGHT US LLC, *Defendants*.	§	

CLAIM CONSTRUCTION ORDER

Before the Court is Plaintiffs' Opening Claim Construction Brief (Dkt. No. 101) filed by Carma Technology, Corp. and Carma Technology, Ltd. Also before the Court is the Defendants' Responsive Claim Construction Brief (Dkt. No. 106) filed by Uber Technologies, Inc., Uber Freight Holding Corporation, and Uber Freights US LLC, along with Plaintiffs' Reply Claim Construction Brief (Dkt. No. 109). The Court held a hearing on June 9, 2026. Having considered the parties' briefing, submitted evidence, and heard arguments from counsel, the Court resolves the disputes as ordered herein.

I. BACKGROUND

Plaintiffs allege infringement of five related patents directed to improvements in a shared transportation network: U.S. Patent Nos. 7,840,427, 10,741,071, 10,916,138, 11,017,668, and 11,164,456 (collectively, "Asserted Patents"). All five patents share the same specification.

The '427 Patent is titled "Shared transport system and service network" and its Abstract sets forth as follows:

> The network system matches the supply and demand of transportation services by incorporating unused transportation capacity (i.e., empty seats) with a real-time allocation and matching service that enables individuals and goods to conveniently

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> hire that capacity with attractive pricing, rapid responsiveness, better information availability and trusted security. The network system provides an electronic registry of capacity containing an indication of the spare transport capacity and location of a plurality of transport vehicles, an electronic registry of demand containing an indication of the demand for transportation needs of a plurality of individuals and a central processing capability to effect a match of the transport capacity of at least one transport vehicle with the transport demand of at least one individual.

The ’071 Patent is titled “Systems and methods for proxy communication in a shared transport system.” The ’138 Patent is titled “Systems and methods for utilizing a shared transport network for delivery of goods.” The ’668 Patent is titled “Systems and methods for managing anomalous conditions in a shared transport system.” And the ’456 Patent is titled “Systems and methods for matching pick-up requests with transport providers, tracking trip progress, and enabling provider ratings.” These four patents are continuations of the ’427 Patent (the “Continuation Patents”) and claim related systems and methods. The Continuation Patents share a common Abstract, which states as follows:

> The network system triggers registration of the start of a transport journey in response to a communication of a transport user device and a transport provider device with each other, performs a continuous coordinated proximity monitoring to verify the identity of a transport user and a transport provider vehicle, and triggers registration of the end of the transport journey through communication of the transport user device and the transport provider device with each other.

II. LEGAL STANDARDS

“‘[T]he claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips v. AWH Corp.,* 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*) (quoting *Innova/Pure-Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). “[T]he court has the power and obligation to construe as a matter of law the meaning of language used in the patent claim.” *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (*en banc*), *aff’d,* 517 U.S. 370, 390 (1996).

To ascertain the meaning of claims, courts look to three primary sources: the claims, the

specification, and the prosecution history. *Markman*, 52 F.3d at 979. The specification must contain a written description of the invention that enables one of ordinary skill in the art to make and use the invention. *Id.* A patent's claims must be read in view of the specification, of which they are a part. *Id.* For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims. *Id.* "One purpose for examining the specification is to determine if the patentee has limited the scope of the claims." *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed. Cir. 2000).

When construing claims, "[t]here is a heavy presumption that claim terms are to be given their ordinary and customary meaning." *Aventis Pharm. Inc. v. Amino Chems. Ltd.,* 715 F.3d 1363, 1373 (Fed. Cir. 2013) (citing *Phillips,* 415 F.3d at 1312–13). Courts must therefore "look to the words of the claims themselves . . . to define the scope of the patented invention." *Id.* (citations omitted). "[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, *i.e.,* as of the effective filing date of the patent application." *Phillips,* 415 F.3d at 1313. This "person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Id.*

There are, however, two exceptions to this rule. The first exception is when a patentee sets out a definition and acts as his own lexicographer. The second exception is when the patentee disavows the full scope of a claim term either in the specification or during prosecution. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1580 (Fed. Cir. 1996).

The patentee is free to be his own lexicographer, but any special definition given to a word must be clearly set forth in the specification. *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384,

1388 (Fed. Cir. 1992). As the Supreme Court stated long ago, "in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims." *Bates v. Coe*, 98 U.S. 31, 38 (1878). Although the specification may indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiments. *Electro Med. Sys., S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994).

But "[w]here the specification makes clear that the invention does not include a particular feature, that feature is deemed to be outside the reach of the claims of the patent, even though the language of the claims, read without reference to the specification, might be considered broad enough to encompass the feature in question." *Scimed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1341 (Fed. Cir. 2001). "The patentee may demonstrate intent to deviate from the ordinary and accustomed meaning of a claim term by including in the specification expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope." *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). "Absent a clear disavowal in the specification or the prosecution history, the patentee is entitled to the full scope of its claim language." *Home Diagnostics, Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1358 (Fed. Cir. 2004). A disavowal or disclaimer must be clear and unmistakable. *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1366-67 (Fed. Cir. 2012).

The prosecution history also continues to play an important role in claim interpretation. Like the specification, the prosecution history helps to demonstrate how the inventor and the United States Patent and Trademark Office ("PTO") understood the patent. *Phillips*, 415 F.3d at 1317. Because the file history, however, "represents an ongoing negotiation between the PTO and

the applicant," it may lack the clarity of the specification and thus be less useful in claim construction proceedings. *Id.* Nevertheless, the prosecution history is intrinsic evidence that is relevant to the determination of how the inventor understood the invention and whether the inventor limited the invention during prosecution by narrowing the scope of the claims. *Id.*; *see Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1350 (Fed. Cir. 2004) (noting that "a patentee's statements during prosecution, whether relied on by the examiner or not, are relevant to claim interpretation").

Intrinsic evidence, therefore, is the primary resource for claim construction. *See Power-One, Inc. v. Artesyn Techs., Inc.,* 599 F.3d 1343, 1348 (Fed. Cir. 2010) (citing *Phillips,* 415 F.3d at 1312). But for claim terms with less-apparent meanings, courts consider "'those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean[,] [including] the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.'" *Phillips,* 415 F.3d at 1314 (quoting *Innova*, 381 F.3d at 1116). In those situations, "the district court will need to look beyond the patent's intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period." *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 320 (2015) (citation omitted). "In cases where those subsidiary facts are in dispute, courts will need to make subsidiary factual findings about that extrinsic evidence. These are the 'evidentiary underpinnings' of claim construction that we discussed in *Markman*, and this subsidiary factfinding must be reviewed for clear error on appeal." *Id.* (citing 517 U.S. 370).

However, the intrinsic record may not be sacrificed in favor of extrinsic evidence.

According to *Phillips*, reliance on dictionary definitions, for example at the expense of the specification had the effect of "focus[ing] the inquiry on the abstract meaning of words rather than on the meaning of claim terms within the context of the patent." *Id.* at 1321.

The Supreme Court of the United States has "read [35 U.S.C.] § 112, ¶ 2 to require that a patent's claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910, 134 S. Ct. 2120, 2129 (2014). "[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Id.* The claims "must be precise enough to afford clear notice of what is claimed," but that consideration must be made while accounting for the inherent limitations of language. *Id.* at 908. "Indefiniteness must be proven by clear and convincing evidence." *Sonix Tech. Co. v. Publ'ns Int'l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017).

III. AGREED TERMS

Pursuant to the submitted P.R. 4-5 Joint Claim Construction Chart (Dkt. No. 117), the parties have agreed on claim constructions for the following terms, which the Court hereby adopts:

Term	Agreed Construction
"the provider characteristics including a current location or planned route and an available space or capacity of the transport provider, the provider characteristics being received from a transport provider device of the transport provider" / "the provider characteristics being received from a transport provider device of the transport provider" ('138 Patent, cl. 1, 10, 18)	"the provider characteristics including (1) a current location or planned route, and (2) an available space or capacity of the transport provider, each received from the transport provider device of the transport provider"
"anomalous condition" ('668 Patent, cl. 1, 4, 5, 8, 10, 12, 15, 16, 19, 20)	Plain and ordinary meaning

IV. DISPUTED TERMS

1. "network of nodes" ('427 Patent, claims 1, 3, 15)

Plaintiffs' Construction	Defendants' Construction
"a set of geographic locations (such as addresses or intersections) where a customer could be picked up or dropped off"	"the pick-up points and drop-off points interconnected by predetermined transport vehicle journey routes"

The term "network of nodes" appears in the '427 Patent. The parties present competing proposals that turn on whether nodes must be defined by and derived from predetermined transport vehicle journey routes, or whether the term simply designates a set of geographic locations that the system establishes as pick-up and drop-off points.

Plaintiffs propose construing "network of nodes" as "a set of geographic locations (such as addresses or intersections) where a customer could be picked up or dropped off." Plaintiffs argue that the claim language itself defines nodes as representing "a plurality of pick-up points and a plurality of drop-off points," and that interconnection to a route is a feature of a different claim element. Thus, it is separate from the network of nodes definition and should not be imported here.

Plaintiffs note that the specification discloses three independent node-establishment methods, including creation by an in-vehicle system, none of which requires connection to a predetermined route. Plaintiffs thus contend that the nodes must come first, before the route, rather than being defined by it.

Defendants propose construing "network of nodes" as "the pick-up points and drop-off points interconnected by predetermined transport vehicle journey routes." Defendants argue that both "network" and "nodes" connote connection and intersection, that the specification describes nodes as route-intersection points (Figs. 9b and 14a), and that the "establishing" step would be superfluous if any and all geographic locations qualified as a node. Defendants add that the prosecution history "clearly and unambiguously support" its construction, though its argument does not rely on prosecution disclaimer and rests on the specification alone.

The Court begins its analysis with an examination of the claims. Claim 1 of the '427 Patent is representative for purposes of studying this term. Claim 1 reads as follows, with the disputed term noted in bold:

> 1. A method of sharing transportation employing a ground transportation network comprising the steps of[1]
>
> [1a] providing a computer network;
> [1b] establishing an electronic registry in said computer network of capacity containing an indication of the spare transport capacity and location of a plurality of transport vehicles;
> [1c] establishing a **network of nodes** in said computer network representing a plurality of pick-up points and a plurality of drop-off points;
> [1d] abstracting a geographic representation of a predetermined transport vehicle journey by calculating places where said predetermined transport vehicle journey intersects said nodes and representing said predetermined transport vehicle journey in the format of a set of said nodes;
> [1e] providing an electronic registry in said computer network of demand containing an indication of the demand for transportation needs of a plurality of transport users;

[1] Bracketed enumeration added for ease of reference.

> [1f] effecting a match in a match engine in said computer network of said transport capacity of at least one transport vehicle in said electronic registry of capacity with said transport demand for a journey of at least one transport user in said electronic registry of demand for transport between at least two of said nodes.

As Plaintiffs asserted, the words of claim 1 define what nodes are in step [1c]. The claim clearly says that nodes represent pick-up and drop-off points without adding a requirement about how the nodes are generated or connected. Interconnection by a predetermined route is conspicuously absent from step [1c]. The phrase a "predetermined transport vehicle journey" appears only in the separate "abstracting" step [1d] that follows.

The claim's sequential architecture is instructive. A functional reading of claim 1 shows that (i) the system must first establish a node network, (ii) the system selects a pre-existing journey and computes where it intersects the established nodes in an abstraction process; and then (iii) the system matches transport capacity to demand to set up a rider's journey on the abstracted version of the driver's journey.[2] The driver's journey does not create the nodes; nor do the nodes depend on the driver's journey. All that is required is determining whether and where the network of nodes intersect with the driver's journey to create the abstracted version of the driver's journey for use as a reference to plot the rider's journey if capacity matches demand.

Defendants' construction defining nodes as pick-up and drop-off points "interconnected by predetermined transport vehicle journey routes" blurs the distinction between steps [1c] and [1d]. If nodes are defined by their interconnection with predetermined routes, the subsequent step of calculating "places where said predetermined transport vehicle journey intersects said nodes" would add no further meaning. The points of intersection would already be established by the

[2] Notably, "a journey of at least one transport user" in step [1f] is a different journey than "a predetermined transport vehicle journey" in step [1d].

node-definition step so nothing would remain to be calculated. A claim construction that renders a claim limitation superfluous is rarely correct.

Furthermore, the "predetermined" modifier was added during prosecution to "transport vehicle journey" in the abstracting step. Defendants' construction improperly extends "predetermined" across claim limitations to which it was not applied.

The specification further demonstrates that nodes need not be route-derived. The specification provides three disjunctive methods of establishing nodes, none of which depend upon interconnection with the driver's journey:

> [F]or the purposes of establishing a shared transport network, it is useful to establish a network of pick-up and drop-off points (nodes), so that Riders and Drivers can be guided to places that are safe and convenient and comfortable for both the Riders and Drivers. This network of stops can, for example, be pregenerated from existing databases of stops from existing bus networks, entered using traditional GIS systems, or in fact created by the in-vehicle system 17.

('427 Patent, 14:57–64.) These non-exhaustive examples offer a range of options for how a node network can be created ranging from being pre-generated from existing stops in a known route network to being created from inside the vehicle itself (as captured in claim 3). But none of these options depend upon a predetermined journey.

The parties' briefing and oral argument characterize the in-vehicle system as establishing nodes on the fly while mid-journey with a rider. The structure of claim 1, however, requires the nodes to be established ***before the trip begins***. This is evident by the last step in the claimed method, "effecting a match . . . of said transport capacity of at least one transport vehicle . . . with said transport demand . . . for transport between at least two of said nodes." As the driver must be matched to the rider before the joint trip can begin, the nodes must likewise be established before the trip begins. Therefore, the in-vehicle system cannot include mid-journey creation and be an embodiment of claim 1. The more reasonable understanding is that the in-vehicle system is exactly

what it is described to be—a system for generating nodes from inside the vehicle. Thus, Defendants' construction that the nodes are defined by their interconnection with the predetermined transport vehicle journey route is unsupported.

The specification further describes the abstraction process with the presumption that the nodes exist before being mapped to the route: "The system calculates the places where the route of this line intersects a stop node, and thus can present the journey at the end of the route in the format of a very useful and concise set of major stops, rather than an incomprehensible list of addresses or geographic co-ordinates." ('427 Patent, 15:1–5.) As disclosed, the system takes a pre-existing route and checks it against pre-existing nodes. It does not generate nodes ***from*** the route.

Indeed, if nodes were route-derived, no such calculation would be necessary because the intersection points would, by definition, be the nodes. What's more, the contrast between "a very useful and concise set of major stops" and "an incomprehensible list of addresses or geographical co-ordinates" evinces that nodes are specific designated pick-up and drop-off points rather than any possible geographic location.

The independent status of nodes in relation to the route is confirmed by yet another passage in the written description:

> When a driver starts the vehicle ("Driver 13"), a Driver Software Interface automatically determines if the Driver 13 is engaged in a traditional route ("Supply Route"), and registers the transport capacity of the Driver 13 ("Transport Capacity") with the Shared Transport Marketplace 12. Alternatively, if the Driver is not engaged in a traditional route, the driver is prompted for their destination, or possibly is shown a list of riders possibly headed in the same general (or likely) direction as the Driver, for the Driver to consider sharing, if the Driver's destination is not known. This Transport Capacity would be then registered with the Shared Transport Marketplace 12.

('427 Patent, 7:32–43.) In the alternative route situation, a driver whose direction is known but whose destination is unknown is first shown rider demand ***before*** declaring his route. The node

network that enables those matches must therefore exist independently of any route registered by that driver. Defendants' proposed construction cannot be reconciled with this scenario.

The prosecution record is consistent with the claim structure and the patent as a whole. The Examiner's interview summary records the Applicant's own framing of the "predetermined" amendment:

> Applicant asserted that the "abstracting" step was different than the prior art in that an existing route is checked versus the plurality of pickup/dropoff nodes, as opposed to each route being predefined by the plurality of pickup/dropoff nodes.

(Dkt. No. 106-9, p. 5.) The Applicant's assertion that "an existing route is checked versus the plurality of pickup/dropoff nodes" casts nodes as the fixed reference point against which routes are checked—not as points derived from the routes.

Other prosecution statements further confirm that nodes are the stable infrastructure and that routes are the flexible connecting elements. The applicant adds more color to a node network being built from the "bottom up" through in-vehicle device creation: "the stops are created by users using an in-vehicle device, and those stops are made available to other users, which allows the network to expand organically." (Dkt. No. 106-7, p. 8–9.) A network that expands organically through user-created stops that can then become available for subsequent trips conflicts with the notion that every node must start as an intersection of a pre-registered route.

The Applicant went on to add that "[r]oute matching of the invention is much more flexible, as there are many different ways to connect nodes, rather than just a single link." (Dkt. No. 106-7, p. 10.) These statements confirm that routes are the variable connecting medium and nodes are the reference points. Defendants' construction would invert this relationship.

For extrinsic support, Defendants submitted general purpose and technical dictionary definitions for "network" and "node." The dictionaries define "node" as "an interconnection point

in a structure or network," which is a location where links may meet and not a location generated by those links. "Network" is defined as "a system made of a number of points or circuits that are interconnected." Neither requires that the connection defines the points to be connected. Rather, these ordinary meanings are consistent with the claim's own definition of nodes as specific pick-up and drop-off points.

For the foregoing reasons, the Court finds that Defendants' proposal is incorrect and not supported by the weight of the evidence. Plaintiffs' proposal ("a set of geographic locations (such as addresses or intersections) where a customer could be picked up or dropped off") is directionally correct but redundant of the claim language.

The Court construes **"network of nodes" to mean "a set of geographic locations designated before effecting a match."** "Designated" gives operative effect to "establishing" as the system selects and designates specific locations from among all possible geographic points. The surrounding claim language ("representing a plurality of pick-up points and a plurality of drop-off points") provides the functional description and the construction need not restate it. The designation taking place "before effecting a match" clarifies the operational sequence of the claim.

2. "predetermined transport vehicle journey"/ "predetermined journey of a transport vehicle" ('427 Patent, claims 1, 15)

Plaintiffs' Construction	Defendants' Construction
No construction required, plain and ordinary meaning.	"a trip along an existing route defined before demand for transport and independently of a transport user's door-to-door trip"

The dispute as to these terms is whether "predetermined" requires the transport vehicle journey to be (i) an existing route that is defined ***before*** demand for transport enters the system, and/or (ii) a route ***independent of*** any user's door-to-door trip. Both points are flavors of the same underlying question—whether the "predetermined transport vehicle journey" is dependent upon

where the transport user wants to go. The parties present a genuine dispute about claim scope and because the disputed term appears to be a term of art rather than ordinary parlance, the Court will construe this term. *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008).

Plaintiffs argue that "predetermined" carries its plain and ordinary meaning and needs no construction. Plaintiffs contend that point (i) appears nowhere in the specification or prosecution history, and that the specification provides that drivers can be guided off their normal routes. As to point (ii), Plaintiffs argue the applicant did not state that the invention of the '427 Patent cannot be door-to-door and did not disclaim a transport vehicle journey that is defined independently of a transport user's door-to-door trip. To the contrary, Plaintiffs note that the specification specifically provides for "direct point-to-point service by taxi transport." ('427 Patent, 8:8–14.)

Defendants argue that the modifier "predetermined" requires both points. As to point (i), Defendants contend the specification depicts drivers registering "Supply Routes" before any ride is requested (Figs. 5a, 6a, described "in accordance with the invention") and that the matching system cannot function unless pre-registered routes exist. As to point (ii), Defendants invoke the prosecution history, contending that the applicant distinguished Lecouturier's "door to door approach" by providing "specific pick-up and drop-off locations [nodes] that do not require a driver to divert." (Dkt. No. 106-8, Aug. 9, 2010 Amendment, at p. 8–9.) Defendants further invoke the European prosecution by asserting that the applicant characterized the invention as "counter-intuitive" because prior art "instructed the vehicle to drive to the location where the user happens to be located, akin to a taxi company." (Dkt. No. 106-10, p. 1–2.)

In reply, Plaintiffs contend the prosecution history fails the "clear and unmistakable" standard and that the prior art distinction was about abstracting to nodes versus door-to-door

routing, not about temporal pre-registration. Plaintiffs also argue the European prosecution describes "flexibility in real time rather than fixing the journey beforehand."

The Court's analysis begins with the claim language.[3] Referencing the enumerated elements of claim 1 of the '427 Patent, reproduced above, the Court notes that the sequential structure informs the meaning of "predetermined." Element [1d] requires "abstracting a geographic representation of a predetermined transport vehicle journey by calculating the places where said journey intersects said network of nodes." The journey and the node network enter the abstraction step as two separately established independent facts and the abstraction step computes where they cross. As explained above, the journey is not derived from the nodes, and the nodes are not derived from the journey. Neither the journey nor the nodes are derived from demand, which is another distinct input of a separate step [1e]. The matching step [1f] then operates on "said nodes"—the output of the abstracted journey in step [1d]—because matching cannot be done until the journey/node intersections are known. Matching step [1f] then matches the inputs of transport capacity to the user demand for a ride between nodes of the abstracted journey.

The plain language of claim 1 makes clear that the nodes, the predetermined journey, transport capacity, and user demand are all separate and distinct inputs into the claimed method. They can temporally coexist or be introduced in any order. However, the steps [1c,] [1d], and [1f] in the process must take place in sequence. Working backwards, matching capacity to demand cannot happen until it is known whether the journey will intersect the requested pick-up and drop-off nodes, which requires the abstraction to be complete. If the journey does not intersect the nodes, there would be no reason to match capacity to demand. Similarly, the journey must exist before

[3] The same reasoning applies to claim 15, which, though ordered differently, contains similarly structured limitations.

being abstracted or calculated to check if it intersects the network of nodes. Adding the word "predetermined," which the Examiner suggested and the Applicant agreed, gave special meaning to the separation of elements and underscores their distinct contributions to the claimed invention.

The claim language, therefore, identifies the transport vehicle journey as a known input to the abstraction step before the calculation can run. It is a simple structural separation and not a temporal sequencing requirement between the vehicle's route and the user demand.

As explained, the words in the claim establish separateness of journey and demand but are silent on the order in which they may exist. Defendants argue that the journey must precede demand. The specification, however, discloses otherwise. In particular, the passage at 7:32–43 describes an instance where the transport demand may predate route definition because riders whose demand already exists in the system are displayed to the driver ***before*** the driver has declared a destination. This passage reveals a rider's demand before the driver registers the driver's route, so that the driver can determine the most profitable choice. Thus, the '427 Patent contemplates that user demand can precede determination of the vehicle journey.

For these reasons, part (i) of Defendants' proposed construction is rejected.

Part (ii) of Defendants' proposal, however, has more merit. The prosecution record contains several statements that combine into an apparent disclaimer of demand-constructed routing in claims 1 and 15 of the '427 Patent. In responding to an office action rejection, the Applicant distinguished Lecouturier's "door to door approach," where a driver "may have to divert from his natural route to reach the pick-up or drop-off point," as follows:

> By providing specific pick-up and drop-off locations [nodes] that do not require a driver to divert, rather than using blocks of a street to guide a driver to a pick-up point, the claimed method enables one to more easily achieve a critical mass of users.

(Dkt. No. 106-8, August 9, 2010 Amendment, p. 8–9.) Notably, the patentee argued that claim 1's step of "abstracting a geographic representation of a predetermined transport vehicle journey by calculating places where said predetermined transport vehicle journey intersects said nodes" requires specific pick-up and drop-off locations rather than being diverted off journey to a user's unique location. This statement identifies the claimed nodes as the location to which both driver and rider navigate. Unlike Lecouturier's model, which constructs each route to serve a specific user's demand, the claimed invention would enable use by a critical mass of users precisely because no per trip deviation is contemplated. In other words, the journey is not organized around demand. Rather, demand is matched to a driver's existing independent journey.

The Applicant's assertions captured in the August 30, 2010 interview summary make the structural principle explicit:

> Applicant asserted that the 'abstracting' step was different than the prior art in that ***an existing route is checked versus the plurality of pickup/dropoff nodes, as opposed to each route being predefined by the plurality of pickup/dropoff nodes***. Examiner agreed that such a distinction would distinguish over the prior art of record. ***Examiner suggested including that the transport vehicle journey was 'predetermined' so that a fluid routing system such as Lecouturier would not disclose the claimed invention.*** Applicant's representative agreed to add the 'predetermined' language in an Examiner's amendment.

(Dkt. No. 106-9, p. 5) (emphasis added). The Applicant clearly stated that the "abstracting" step demonstrates that the existing route is not defined by the request for pick-up or drop-off. The Applicant even amended the claim language to emphasize that the transport vehicle journey must be "predetermined" to distinguish over the fluid routing systems in the prior art. Doing so resulted in a notice of allowance and issuance of the '427 Patent.

Consequently, the scope of this term has been narrowed by the Applicant's disparagement of prior art, his statements that the driver's route is not defined by user demand, and amendment to the claim term by adding "predetermined." The Court finds that the patentee has made a clear

and unmistakable disclaimer of the "abstracting" step of claims 1 and 15 in that a "predetermined transport vehicle journey" cannot be defined by or be dependent upon user demand. Stated differently, the nodes must exist independent of the driver's journey (though they may be established organically or change as demand changes) and the vehicle's route is assessed in relation to the nodes in order to check if they intersect.[4] The route is not defined by the nodes or a rider's demand for pick-up and drop-off. Hence, the driver is not routed to pick-up a rider if he has not otherwise determined to travel in that direction.

Though not determinative, the European prosecution file is consistent with and corroborates the United States prosecution record where the applicant repeatedly distinguished its invention from driving to the location where the user is requesting pick-up.

In summary, Defendants' argument that "predetermined transport vehicle journey" meaning that the (i) "existing route defined before demand for transport" is improperly framed as a temporal restriction. However, Defendants' contention (ii) that the journey exists "independently of a transport user's door-to-door trip" is correct, though the Court drops the phrase "door-to-door" as unnecessary and to avoid confusion.

Upon reviewing the intrinsic record and the patent as a whole, the Court construes **"predetermined transport vehicle journey" and "predetermined journey of a transport vehicle" to mean "a transport vehicle's journey defined independently of the transport user's demand."**

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[4] Indeed, the claim language itself compels this result apart from the disclaimer because the predetermined journey must exist as an independent factor before the abstraction step can compute where it intersects the node network, as discussed herein and in the preceding term.

3. "shared transport system" ('071 Patent, claims 1, 14, 20; '138 Patent, claims 1, 9, 10, 18; '668 Patent, claims 1, 2, 4, 5, 8, 10, 13, 15, 16, 19, 20; '456 Patent, claims 1, 7, 11)

Plaintiffs' Construction	Defendants' Construction
No construction required, plain and ordinary meaning.	"a server system that matches transport users with transport providers traveling an existing route defined before demand for transport and independently of a transport user's door-to-door trip"

The dispute as to this term is whether the '427 Patent prosecution history disclaimer, which is expressly directed to the abstracting step, flows through the patent family to limit "shared transport system" in the Continuation Patents, where the Continuation Patents' claims do not contain that "shared transport system" limitation. The parties also disagree about whether a server requirement can be imported from the specification. A genuine dispute about claim scope requires the Court to render a construction. *O2 Micro*, 521 F.3d at 1360.

Plaintiffs argue that the specification contains definitional language that aligns with the plain and ordinary meaning of the term. In particular, Plaintiffs point to a sentence that explains "the invention provides a network system that matches the supply and demand of transportation services by incorporating unused transportation capacity (i.e., empty seats) with a real-time allocation and matching service." ('427 Patent, 2:65–3:4) Plaintiffs disagree with Defendants' construction by arguing that no "server" requirement exists, and that the prosecution statements are limited to specific claim language in the '427 Patent claims that are absent from the continuation claims and thus cannot restrict this term.

Defendants contend that the patentee's prosecution statements consistently characterize the invention as a whole and are directed to the same subject matter, so they must flow through to limit continuation patents. In support of the server requirement, Defendants point to Figure 1, which illustrates a network system having components "in accordance with the invention." Because it

depicts a "Shared Transport Marketplace Server," the server must be an essential structural element implicit in the claims.

The Court begins its analysis by considering whether the prosecution history disclaimer found to limit Term No. 2 ("predetermined transport vehicle journey" in the '427 Patent) applies with equal force to this term; the Court concludes that it does not.

First, a plain reading of the Continuation Patents reveals that the phrases "predetermined transport vehicle journey," "network of nodes," and the entire "abstracting" step addressed in the '427 Patent prosecution history are noticeably absent from its offspring.

The '071 Patent, claim 1, provides for a shared transport network that identifies a transport user and transport provider for the purpose of exchanging messages through a proxy messaging system. There is no requirement to determine a route in advance. Rather, the method is triggered by a transport request and resolves based on the proximity of driver and rider devices in real time.

The '138 Patent, claim 1, recites a shared transport network that matches the transport provider to requests for delivering of goods, where the provider characteristics include "current location or planned route and an available space or capacity of the transport provider." Here, the "current location" being an alternative to a planned route[5] is in direct opposition to Defendants' argument that providers must travel "an existing route defined before demand for transport." Accordingly, Defendants' proposal cannot be correct.

The '668 Patent, claim 1, recites a shared transport system that monitors for anomalous conditions without reference to a route at all beyond receiving "a pick-up location and a destination." Dependent claim 4 references a "route" but only in the context of detecting an

[5] The parties agreed to this construction, as identified on p. 7, *supra*.

anomaly (comparing the deviation to the route). There is no requirement that the "route" be defined before demand for transport.

The '456 Patent, claim 1, recites a shared transport system fulfilling transport requests using navigation instructions "along a route from the pick-up location to the drop-off location based on one or more of the GPS position data of the transport provider device or GPS position data of the transport user device." This is clearly live location tracking.

Thus, Defendants have failed to identify anything in the claims of the Continuation Patents that require a vehicle's route to exist or to be defined independently of a user's demand.

Defendants rely heavily on *Ormco Corp. v. Align Tech., Inc.*, 498 F.3d 1307, 1314 (Fed. Cir. 2007) to argue that prosecution statements in familial patents are relevant to interpreting the claims of downstream child patents. But *Ormco* requires the statements to be overarchingly directed to the invention as a whole without being tethered to specific claim language. Here, every prosecution statement Defendants cited was in response to a rejection of the "abstracting" limitation and were all organized around that term. None were clearly directed to the invention as a whole.

The more applicable authority on these facts is *Invitrogen Corp. v. Clontech Labs., Inc.*, 429 F.3d 1052, 1078 (Fed. Cir. 2005), which states that "the prosecution of one claim term in a parent application will generally not limit different claim language in a continuation application." *See also Ventana Med. Sys. v. BioGenex Labs., Inc.*, 473 F.3d 1173, 1182 (Fed. Cir. 2006), which states that "the doctrine of prosecution disclaimer generally does not apply when the claim term in the descendant patent uses different language." Thus, the Court finds that the prosecution disclaimer in the '427 Patent cannot be applied to the Continuation Patents.

To connect the disclaimer to this claim term, Defendants point to the European prosecution statement that "[t]he apparatus is termed a 'shared transport system' throughout, to avoid confusion with the 'network of nodes' which it establishes." (Dkt. No. 106-10, p. 1.) That statement, however, is a nomenclature clarification that identifies the label "shared transport system" as referring to the claimed apparatus as opposed to the sub-feature "network of nodes." It is not a substantive inventor definition. There is no clear and unmistakable disclaimer as to this term in the intrinsic evidence.

Moreover, no continuation claim contains a server requirement. Defendants' "server system" construction cannot survive the absence of any server limitation in any of the four continuation claims.

The "Shared Transport System," however, is a term coined by the inventor. The specification capitalized each word and identified it as the network system with parentheses and quotations at lines 3:16–23 ("network system ('Shared Transport System') . . ."). The specification goes on to summarize the invention according to the network system as follows:

> Briefly, the invention provides a network system that matches the supply and demand of transportation services by incorporating unused transportation capacity (i.e., empty seats) with a real-time allocation and matching service that enables individuals and goods to conveniently hire that capacity.

('427 Patent, 2:65–3:4.) This passage, which Plaintiffs label as "definitional," is relied upon by both sides in their briefing. Although Defendants argue that the identification of a "network system" infers use of a server, there is no such evidenced mandatory requirement and the Court declines to impose one. The server illustrated in Figure 1 is of a preferred embodiment and cannot be imported to limit the claims.

For the foregoing reasons, the Court construes **"shared transport system" as "a network system that matches the supply and demand of transportation services by incorporating**

unused transportation capacity (i.e., empty seats) with a real-time allocation and matching service that enables individuals and goods to conveniently hire that capacity with attractive pricing, rapid responsiveness, better information availability and trusted security."

4. **"pick-up location"/ "drop-off location" ('071 Patent, claims 1, 14, 20; '138 Patent, claims 1, 10, 18; '668 Patent, claims 1, 12, 20; '456 Patent, claims 1–4, 7, 11–13, 19)**

Plaintiffs' Construction	Defendants' Construction
No construction required, plain and ordinary meaning.	"a node along an existing route defined before demand for transport and independently of a transport user's door-to-door trip"

The dispute as to these terms is whether "pick-up location" and "drop-off location" in claims of the Continuation Patents must be nodes along a pre-demand route, incorporating the prosecution disclaimer issue addressed in Term No. 3. The Court reaches the same conclusion here as to the applicability of the '427 Patent prosecution statements to the Continuation Patents generally, discussed above. The remaining dispute is whether pick-up and drop-off locations should be defined as nodes, or should be given their plain and ordinary meaning.

Plaintiffs urge the Court to adopt the plain meaning because pick-up and drop-off locations are simple terms to understand by a layperson. Defendants contend that the specification uses "nodes" interchangeably with "pick-up and drop-off points," so a definition should be imposed.

Upon review of the implicated claims, the Court notes that none recite "network of nodes," "predetermined transport vehicle journey," or incorporate the "abstracting" step. The word "node" is entirely absent. Rather, each patent uses "pick-up location" and "drop-off location" as standalone terms submitted by a user in making a transport request. The '456 Patent, claim 2, allows the system to modify the "pick-up location" to an "alternative pick-up location" based on proximity of the person to the pick-up location. A "node along an existing route defined before demand for transport" cannot be modified later to an alternative location during runtime. Thus, Defendants' construction conflicts with the claim language and must be incorrect.

Moreover, the phrases "pick-up points" and "drop-off points" are used in claim 1 of the '427 Patent alongside "nodes," which suggests they differ in scope and meaning. Thus, they are not freely interchangeable.

The specification does not define pick-up and drop-off locations as nodes, and Defendants do not argue lexicography. When the specification refers to "nodes (pick-up and drop-off points)," it is to explain that nodes represent pick-up and drop-off points, but not that all pick-up and drop-off points are nodes. ('427 Patent, 14:29–31.) It identifies the subset, not the superset. In the sentence, "for the purposes of establishing a shared transport network, it is useful to establish a network of pick-up and drop-off points (nodes)," the nodes are describing the established network of pick-up and drop-off points, not all of them. (*Id.*, 14:57–59.) Accordingly, both readings consistently identify nodes as a subset of possible pick-up and drop-off points without restricting the inverse.

The specification further explains that the system "can present the journey . . . in the format of a very useful and concise set of major stops, rather than an incomprehensible list of addresses or geographic co-ordinates." ('427 Patent, 15:2–5.) In other words, the advantage of the node abstraction is precisely that nodes are a finite subset of all possible addresses. Characterizing all pick-up and drop-off locations as nodes would collapse this distinction entirely.

Accordingly, Defendants have failed to identify where in the record the patentee clearly set forth a definition that all pick-up and drop-off locations are nodes. Without more, the Court declines to presume such an equivalence. "Pick-up location" and "drop-off location" are ordinary compound English terms with no special technical meaning requiring construction. Indeed, neither party has submitted that they do not understand what pick-up location or a drop-off location is within a claim. Accordingly, the term should be presumed to have its plain and ordinary meaning.

The Court therefore finds that **"pick-up location" and "drop-off location" should be given their plain and ordinary meaning.**

5. **"transport provider" ('071 Patent, claims 1, 14, 19, 20; '138 Patent, claims 1–4, 9–13, 18; '668 Patent, claims 1, 2, 4, 5, 8, 10, 12, 13, 15, 16, 19, 20; '456 Patent, claims 1, 3–5, 7, 10, 11, 13–15, 19, 20)**

Plaintiffs' Construction	Defendants' Construction
No construction required, plain and ordinary meaning.	"a driver offering transport along an existing route defined before demand for transport and independently of a transport user's door-to-door trip"

Similar to the preceding term, the dispute on this term is whether a "transport provider" in the Continuation Patents must be a driver offering transportation along a pre-demand route, incorporating the prosecution disclaimer issue addressed in Term No. 3. The Court reaches the same conclusion here regarding the applicability of the '427 Patent prosecution as in the preceding disputed term. The remaining dispute is whether a transport provider should be defined as a driver providing transport or should be given its plain and ordinary meaning.

Plaintiffs argue that transport provider is a simple self-explanatory term that needs no definition. Defendants respond that the specification uses "transport provider" and "driver" interchangeably and should be construed accordingly.

The term "transport provider" appears in the Asserted Patents structurally paired with "transport user" as the two participant roles in the shared transport system. In every instance, the transport provider provides transportation of people and/or goods. The "transport provider" is separate from the "transport provider device" used for navigation and communication, and distinct from the "transport provider vehicle." (*See, e.g.*, '427 Patent, claim 7.) According to claim 1 of the '138 Patent, the transport provider has characteristics such as a location and capacity for carrying goods. And claim 1 of the '456 Patent adds that the transport provider is available to service pick-

up requests in real time. All of this suggests that the transport provider is a driver who offers transportation services.

The specification confirms that the patentee equates a driver with a transport provider by identifying them with a slash notation: "the Transport Providers/Drivers are managed by a system 705 which considers their ratings…and their community memberships 713." ('427 Patent, 20:43–47.) Reference to the driver/rider dynamic is consistently applied throughout the specification.

During oral arguments, the parties agreed that the transport provider is a human person. The specification discloses the transport provider as having certain trust parameters such as "sex or experience." ('427 Patent, 24:28-29.) To avoid confusion with "transport provider" being confused with a driverless vehicle or a corporate entity, the Court finds this term can benefit from a clear construction.

Accordingly, the Court construes **"transport provider" to mean "a driver providing transportation."**

V. CONCLUSION

The Court adopts the constructions as set forth in this opinion for the disputed terms of the Asserted Patents.

The parties are ordered that they may not refer, directly or indirectly, to each other's claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the Court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

SIGNED this 26th day of August, 2026.

26 ROY S. PAYNE
UNITED STATES MAGISTRATE JUDGE