

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UBER TECHNOLOGIES, INC AND UBER FREIGHT US LLC,
Petitioner,

v.

CARMA TECHNOLOGY, LTD.,
Patent Owner

Case IPR2026-00307
Patent 11,164,456

PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	THE PARTIES AND PETITIONER’S AWARENESS OF THE TECHNOLOGY DISCLOSED IN THE ’456 PATENT	3
A.	Carma	3
B.	Uber	7
III.	ARGUMENT.....	11
A.	The Scheduled Trial Date and Advanced State of District Court Activities Weigh in Favor of Denial	11
B.	Strong Settled Expectations Favor Denial	16
IV.	CONCLUSION	16

PATENT OWNER’S EXHIBIT LIST

Exhibit No.	Description
2001	First Amended Complaint, <i>Carma Tech., Corp. v. Uber Tech., Inc.</i> , Civ. No. 2:25-cv-29 (E.D. Tex. Aug. 14, 2025)
2002	Agreed Docket Control Order, <i>Carma Tech., Corp. v. Uber Tech., Inc.</i> , Civ. No. 2:25-cv-29 (E.D. Tex. June 2, 2025)
2003	U.S. District Courts - Federal Court Management Statistics– Comparison Within Circuit (December 31, 2025) (available at https://www.uscourts.gov/sites/default/files/document/fcms_na_distcomparison1231.2025.pdf)
2004	Memorandum Order, <i>Headwater Research LLC v. Samsung Electronics Co., Ltd.</i> , Civ. No. 2:23-CV-00103 (Dec. 11, 2024)
2005	Defendant Uber Technologies, Inc.’s Invalidity Contentions, <i>Carma Tech., Corp. v. Uber Tech., Inc.</i> , Civ. No. 2:25-cv-29 (E.D. Tex. July 30, 2025)

Pursuant to the Director’s Memorandum issued on March 26, 2025, Patent Owner Carma Technology, Ltd. (“Patent Owner” or “Carma”) files this request and brief on discretionary denial, setting forth reasons why the Director should exercise discretion to deny the Petition for *inter partes* review (“IPR”) of claims 1-5, 7, 10-15, 19, and 20 of U.S. Patent 11,164,456 (the “’456 patent”), as requested by Uber Technologies, Inc. and Uber Freight US LLC (“Petitioner” or “Uber”).

I. INTRODUCTION

The ’456 patent is nearly 5 years old and is no stranger to Uber. As early as March of 2015, over ten years ago, Uber was evaluating and attempting to distinguish its own pending patent applications over an ancestor to the ’456 patent, U.S. Patent 7,840,427 (“the ’427 patent”) and its corresponding prior publication US 2008/195428 A1 (“the ’428 publication”). Further, Uber has been on formal notice of its infringement of the ’427 patent since at least August 30, 2016, when Carma’s attorney Francis Hand sent Uber a notice letter with a “claim chart evidencing the infringement of claim 1” of the ’427 patent. Through correspondence in 2017-18, Uber confirmed that it evaluated the ’427 patent and Carma’s allegations of infringement against Uber’s Rideshare products.

Additionally, following the service of a complaint alleging infringement of the ’456 patent, Uber waited until nearly the conclusion of its one-year statutory bar period to file this Petition. As a result, the ’456 patent is the subject of a

parallel district court infringement proceeding that is already well underway, with trial scheduled for November 2026.

As a result of Petitioner’s extensive and unexplained delay in filing this Petition, the parallel district court infringement proceeding is well underway, with trial scheduled for this year. In contrast, a final written decision in this proceeding would not be expected until September 2027, nearly nine months *after* the scheduled district court trial date. Indeed, an *institution decision* will not be due in this proceeding until September 16, 2026, less than two weeks before the district court’s Final Pretrial Conference on September 28, 2026, and less than just two months before trial is scheduled to begin. Moreover, Petitioner’s delay is not limited to this proceeding. Currently with this Petition, Petitioner filed four other IPR petitions addressing the remaining patents-in-suit for the ongoing and nearly completed District Court litigation.

Therefore, the parties will litigate, and the district court will resolve the same validity issues Petitioner raises before the Board (and more) long before an IPR final written decision could issue in this proceeding. Allowing this IPR to proceed would constitute a highly inefficient use of Office resources.

A separate reason for denial rests in the strong settled expectations that should be accorded to the ’456 patent. The ’456 patent issued nearly 5 years ago and has been, as noted above, noticed by industry participants including Petitioner.

It represents a valuable asset within the field of transportation system technology. Coupled with the advanced state of the parallel district court litigation, the strong settled expectations for the ’456 patent provide compelling reasons for the Director to discretionarily deny the Petition.

Because Petitioner now comes forward with this Petition, nearly 5 years after the ’456 patent issued, several years after Petitioner was placed on notice of the ’427 patent, and more than a year after Patent Owner’s initiation of a parallel district court litigation, discretionary denial is warranted and respectfully requested.

II. THE PARTIES AND PETITIONER’S AWARENESS OF THE TECHNOLOGY DISCLOSED IN THE ’456 PATENT

Petitioner has been on notice of the patents in the Carma patent portfolio generally since at least 2016.

A. Carma

Sean O’Sullivan, the inventor of the ’456 patent, is a successful technologist and entrepreneur. Ex. 2001, ¶¶2-15. Originally from New York, O’Sullivan began coding at the age of 12 and was subsequently employed as a programmer at age 14 through a government program designed to help disadvantaged youths. He later worked at IBM in Florida and North Carolina and at a federal thinktank in Washington, DC to pay his way through college. *Id.*

After graduating from Rensselaer Polytechnic Institute in 1985 at 21 with a degree in electrical engineering, O’Sullivan co-founded MapInfo, which created PC-based geographic information systems. It was the first widely available system to allow people to type a street address into a computer and see it on a map. MapInfo went public in 1994. *Id.*

In the late 90s and early 2000s, while living in Los Angeles, Mr. O’Sullivan experienced the incredible inefficiency of the highway system with gridlocked infrastructure. He began envisioning ways to improve the city’s traffic and infrastructure problem by utilizing empty vehicle capacity. *Id.*

Over the next few years, Mr. O’Sullivan began conceptualizing an automated system that would allow people to have coordinated shared transport, using smart mobile phones to co-ordinate travel with a centralized cloud-based intelligent marketplace, but with more trust, higher convenience, higher availability, more safety and lower cost than otherwise available. *Id.*

In 2006, while living in Ireland, Mr. O’Sullivan set out to bring his dream to a reality. He filed a provisional patent application on February 12, 2007, which forms the basis for the ’427 patent and other patents now challenged by Petitioner in this and other IPRs. He then acquired a controlling interest in an Irish GIS (Geographic Information Systems) company named MapFlow. *Id.* From MapFlow, he spun out a company called Avego (later renamed to Carma). *Id.*

Avego sought to popularize and systematize carpooling to minimize the impact of automobile traffic.

Avego developed a groundbreaking ridesharing product that included a navigation system with mobile modems and bespoke software in connection with an internet booking system. When the iPhone was released in 2008, Avego ported its driver and user interface to the iPhone and globally launched the idea at the DEMO conference in California in 2008, thus launching the world’s first ridesharing app and with it, the ridesharing industry. *Id.*

The Avego app was well received by the industry and won “best of show” awards from a number of publications, including Wired, CNet, Fortune, San Jose Mercury News, and ABC News. *Id.*

Between 2011-2014, Avego received several contracts from government transit agencies in the United States to help develop and expand ridesharing programs to get more commuter cars off the road. *Id.*

In July of 2013, a strike of the Bay Area Rapid Transit (BART) workers left hundreds of thousands of commuters in the San Francisco Bay Area stranded. Ex. 2001, ¶78. Many commuters were forced to drive causing horrendous traffic in the region. But for commuters who were able to take advantage of the High Occupancy Vehicle (HOV) lane because they were carpooling, traffic was much more tolerable. During the BART strike, Avego was hailed as one of the hero

companies that got people where they needed to go, while at the same time, reducing the number of cars on the road. *Id.* During the strike, Avego was promoted in the region by popular radio hosts (such as Sarah and Vinnie on radio Alice 97.3) and public agencies, and various news outlets (CBS local news, SF Gate, San Jose Mercury News). *Id.* Avego also distributed flyers and set up websites (www.bartstrike.com) to help get people signed up for their services, get into the carpool lane and get to work. *Id.* By the end of the strike, Avego had around twenty thousand subscribers, up from under two thousand. *Id.* A Forbes article later described the BART strike and pointed out a key difference between Avego and Uber at the time: “Some used the walkout as an opportunity check out ride-sharing services such as Uber, Lyft, Sidecar and Avego. Many weren’t aware of the differences between the systems. Some are like taxi services, where you have sole use of the vehicle, while others are more like car-pools, in which several people ride at the same time.” *Id.* In 2013, Avego relaunched as Carma and continued to focus its operations on real time ridesharing and other innovative ways to advance Mr. O’Sullivan’s vision of reducing emissions and congestion on highways without additional infrastructure.

Thus, Carma has been a trusted partner of government agencies at all levels throughout the United States over the past decade. *Id.* Carma has been a pioneer of transportation innovations in public transit, including vanpooling, ridesharing,

carpooling, car sharing, tolling and autonomous vehicles. Carma’s customers include cities, governments, public transport operators and tens of thousands of individual consumers and private transport operators.

And, by virtue of the pioneering work described above, Carma owns a portfolio of over two dozen patents relating to various innovative features of ride-sharing services, taxi-like services, and transportation logistics systems all claiming priority to February 2007.

B. Uber

Uber launched its ridesharing service in San Francisco in 2010 and has continued to operate, and compete with other transportation systems, in the San Francisco Bay Area since that time, with or without the blessing of local government agencies in the San Francisco Bay Area. Ex. 2001, ¶¶75-80. In contrast, the Metropolitan Transportation Commission (MTC) in the counties just north and east of San Francisco announced a grant for a pilot program in 2011 with Carma’s predecessor, Avego, and a company called WeGo to pilot a real-time-ridesharing program. Thus, while the government agencies in the Bay area were trying to shut down Uber for what they deemed illegal operations, the government agencies were supporting Avego in an effort to lawfully reduce traffic congestion in the San Francisco Bay Area. *Id.*

Moreover, due to Uber’s San Francisco Bay Area presence, Uber had to know of the well-publicized Avego app and/or Avego products and services. Indeed, during the BART strike, Uber did not have a carpooling option. It was not until sometime in 2014 that Uber released its UberPOOL carsharing service, and not until May 2022 that it released its Driver Destination feature. As noted below, at the time Uber developed and deployed these services, it was aware of not only Avego but also the ’427 patent.

Uber has been on notice of its infringement of the ’427 patent since at least August 30, 2016, when Carma’s attorney Francis Hand sent Uber a notice letter with a “claim chart evidencing the infringement of claim 1” of the ’427 patent. Ex. 2001, ¶¶64-73. Through correspondence in 2017-2018, Uber confirmed that it evaluated the ’427 patent and Carma’s allegations of infringement against Uber’s Rideshare products. *Id.* Thereafter, Uber continued to deliberately and intentionally infringe the ’427 patent. *Id.*

Uber had, in fact, been aware of the ’427 patent prior to those communications. *Id.* At least as early as March of 2015, Uber was evaluating and attempting to distinguish its own pending patent applications over the ’427 patent and its prior publication US 2008/195428 A1 (“the ’428 publication”). *See* ’427 patent, item (65).

For example, one of Uber’s earliest attempts to patent its technology was unsuccessful after the claims were rejected over the disclosure of the ’427 patent and other references. In December of 2010, Uber filed EP application 10 835 261 seeking protection on an alleged invention called “System and Method for Arranging Transport Amongst Parties Through Use of Mobile Phones.” Two of the named co-inventors on this application were Uber co-founders Garrett Camp and Travis Kalanick. In rejecting Uber’s claims, the patent office identified the ’428 publication on Oct. 10, 2016, November 3, 2017, and again on January 18, 2019. Uber ultimately abandoned its application.

On or around March 14, 2013, Uber filed U.S. Patent Application No. 13/828,481 (“Uber ’481 application”) seeking protection on an alleged invention called “System and Method for Dynamically Adjusting Prices for Services.” Travis Kalanick, co-founder of Uber, was listed as the alleged co-inventor for this application. On March 16, 2015 the examiner rejected claims of this patent as being anticipated by the O’Sullivan ’428 publication. Over the course of more than six years, Uber tried to obtain patent protection on the Uber ’481 application by amending claims, filing requests for continued examination and appeals, but its claims were repeatedly rejected as anticipated and/or rendered obvious by the O’Sullivan ’428 publication. The file wrapper for the Uber ’481 application contains more than 80 pages referencing/discussing the O’Sullivan ’428

publication. At least as early as March 16, 2015, Uber and Mr. Kalanick were thus aware of the O’Sullivan Patents and became intimately familiar with the disclosures therein over the course of the next several years.

On or around May 12, 2015, Uber filed U.S. Patent Application No. 14/709,799 seeking protection on an alleged invention called “Location based prediction of transport services.” During the prosecution of this application, the USPTO rejected Uber’s application as unpatentable over the O’Sullivan ’428 publication and other references. The file wrapper for Uber’s application contains more than 30 pages of discussion relating to the O’Sullivan ’428 publication. Despite several attempts to amend the claims, Uber was unsuccessful in distinguishing its claims. Uber abandoned the application in 2019.

On or around June 30, 2017, Uber filed U.S. Patent Application No. 15/640,155 seeking protection on an alleged invention called “System and Method for Verifying Users for a Network Service using Existing Users.” During prosecution, the claims of this application were rejected as anticipated by and/or obvious over the O’Sullivan ’428 publication. Despite several amendments, Uber was unable to distinguish the O’Sullivan ’428 publication and it ultimately abandoned this application.

Uber also cited to the ’456 patent in an information disclosure statement it filed with the USPTO on May 2, 2024. Ex. 2001, ¶72. Uber thus determined the

’456 patent relevant to the patentability of Uber’s own 12,131,273 patent which is entitled “System and method for facilitating a transport service for drivers and users of a geographic region.”

In all, throughout more than 10 years of prosecuting Uber’s own patent portfolio, Carma patents, patent publications and disclosures have been cited to Uber more than 60 times.

III. ARGUMENT

Despite being aware of the ’427 patent family and Carma’s patent portfolio, including the ’456 patent specifically, for years, Uber files this Petition just months before the scheduled start of trial in district court. The Petition should be denied in view of the strong settled expectations of the ’456 patent coupled with the fact that trial will occur in the parallel litigation involving Petitioner, a willful infringer, and Patent Owner well before a final written decision could issue in this IPR proceeding.

A. The Scheduled Trial Date and Advanced State of District Court Activities Weigh in Favor of Denial

Petitioner has known of the Carma’s patent portfolio since 2015. Ex. 2001 ¶¶63-68. Prior to raising the present dispute in district court, as early as 2016, Patent Owner approached Petitioner in an attempt to resolve its patent dispute with Petitioner. Ex. 2001, ¶¶63. Despite being made aware of Patent Owner’s transportation system portfolio more than 10 years ago, Petitioner did not begin to

file its IPRs against Patent Owner’s portfolio until 2026, and Petitioner has now filed five such IPRs.¹ And even those IPRs were filed at nearly the last possible moment before Petitioner’s statutory bar date. Patent Owner initiated district court action on January 14, 2025, and Petitioner was formally served with the complaint in that action on March 20, 2025. *See* Pet., 1. Nevertheless, Petitioner waited over a full year after the district court action was filed before Petitioner filed its IPR petitions on March 12, 2026.

The District Court trial is scheduled to commence on November 6, 2026. Ex. 2001, 1. Due to Petitioner’s delay, and the pace that courts in the United States can resolve disputes, trial in the parallel district court case is scheduled to occur many months before a final written decision could be expected in this proceeding, around September 16, 2027. This nearly nine-month difference in timing is also consistent with the time-to-trial statistics for the Eastern District of Texas, which predict trial around January 2027 (a seven-month difference). Ex. 2003, 5 (24.0 month time-to-trial for period ending December 31, 2025).

Indeed, even before the Board’s September 16, 2026 deadline for deciding whether to institute this proceeding, the parties will have fully briefed claim

¹The challenged Carma patents (and IPRs) include U.S. Pat. 7,840,427 (IPR2026-00305); U.S. Pat. 10,916,138 (IPR2026-00306); U.S. Pat. 11,164,456 (IPR2026-00307); U.S. Pat. 11,017,668 (IPR2026-00308); U.S. Pat. 10,741,071 (IPR2026-00309).

construction to the District Court, and the District Court will have conducted a Markman Hearing (on June 9, 2026). *See* Ex. 2002, 2-4. Fact discovery will have been completed (June 15, 2026), and, with an expert discovery deadline of July 20, 2026, the parties will have completed expert discovery. *Id.* Also, the parties will have filed (July 27, 2026) and responded to dispositive motions (August 10, 2026), as well as other pretrial activities including the filing of motions *in limine*. *Id.* At that point, the parties will be deep into completion of all necessary litigation activities leading up to the Final Pretrial Conference on September 28, 2026. *Id.* at 1. Even if the District Court’s trial date shifts closer to the statistical trial date of January 2027, the parties and District Court will have invested significant effort in the litigation even before the Board’s Institution Decision issues.

Moreover, without Petitioner achieving success in all five of the IPRs it has filed, it would be unprecedented for the District Court for the Eastern District of Texas to stay a parallel case if an IPR were to be instituted here, because the uniform practice in EDTX has been to proceed to trial if only a subset of patents involved in the case are the subject of parallel Patent Office proceedings. *See, e.g., Headwater Research LLC v. Samsung Electronics Co., Ltd.*, Civ. No. 2:23-CV-00103, slip. op. at 4 (Dec. 11, 2024) (“Here, the PTAB decided to deny institution on one of the IPRs for the ’733 patent and denied institution for the ’117 patent...As such, even an ultimate finding in favor of Samsung invalidating all

claims of the patents in the instituted IPRs would leave material disputes for the Court to decide. This factor weighs against a stay.”) (submitted as Ex. 2004).

Other details support discretionary denial so that the resolution of the parties’ dispute can play out fully and completely in District Court. For example, Petitioner’s challenges in this IPR are based on the O’Sullivan and Olmi references, and Petitioner has presented overlapping validity contentions in the parallel District Court proceeding. *See, e.g.*, Ex. 2005, 25-26 (pdf page) (citing O’Sullivan and Olmi). Petitioner’s narrow and late-filed *Sotera* stipulation does not include any indication that resolution of this IPR would remove any invalidity theory presented in District Court. Indeed, although Petitioner has already presented detailed invalidity contentions in District Court, Petitioner did not include with its stipulation an amended version of its invalidity contentions showing any efficiency in resolution of the overlapping issues. Thus, Petitioner’s inclusion of the same and other invalidity theories in District Court as compared to this proceeding, along with the earlier outcome of the parallel litigation, ensure that this IPR would not be an efficient use of Office resources. Not only will the District Court be able to address any additional issues Petitioner presents exclusively there, but if Petitioner succeeds in invalidating the ’456 patent in district court litigation, then this IPR would not be needed. On the other hand, if Patent Owner is successful in defending the ’456 patent’s validity in the parallel

litigation, then that outcome should also be persuasive evidence to the Board that the same outcome should be reached here. Either way, an outcome in District Court is scheduled to occur well before a final decision would be reached in this IPR, and this timing weighs strongly in favor of discretionary denial.

Moreover, the Petition’s invalidity theories in this case are less based on patents and printed publications and more on whether claims of the ’456 patent are supported by the ancestor ’427 patent. Despite the ’456 patent not being a continuation-in-part of the ’427 patent, the Petition tries to treat it as such. Pet., 3-15. This hybrid 112(1)/103 invalidity theory, which is not solely based on patents and printed publications, will be fully evaluated in District Court. Ex. 2005, 8-10 (pdf pages). There is no need to explore this hybrid invalidity theory in parallel in this proceeding.

Also, Petitioner takes inconsistent positions in District Court compared to its Petition. In District Court, Petitioner contends the ’456 patent does not “allow a person of ordinary skill in the art to understand what is claimed” or “fail to inform, with reasonable certainty, those skilled in the art about the scope of the claimed invention.” Ex. 2005, 157-59, 160, 163-65 (pdf pages). Petitioner includes no such reservations in its Petition. Further, in its District Court invalidity contentions, Petitioner reserves a right to contend that terms in the ’456 patent should be construed under 35 U.S.C. §112, ¶6 in District Court (Ex. 2005, 165-66

(pdf pages)) but later did not address that element as invoking. §112, ¶6 in District Court claim construction briefing. Nevertheless, given that Petitioner did not provide any such reservation in the Petition, these differences show that the District Court case is proceeding to narrow the issues between the parties and will address more issues than can be resolved in this IPR.

B. Strong Settled Expectations Favor Denial

Also weighing in favor of discretionary denial, the ’456 patent has strong settled expectations. The ’456 patent is nearly five (5) years old, having issued on November 2, 2021. While that is more recent than the over 15 years existence of its ancestor ’427 patent, it still represents a significant fraction of its useful life given its effective filing date. And as recounted above, Petitioner knew of the activities of Patent Owner in the United States and knew of the ancestor ’427 patent for over 10 years. Although Petitioner asserts error in the prosecution of the ’456 patent (Pet., 15-16), Petitioner does not explain why it did not challenge validity of the ’456 patent earlier, especially where it made efforts to obtain patent protection covering similar technology, despite the existence of Carma’s patents, for years.

IV. CONCLUSION

When considered individually, the early scheduled trial date, the advanced stage of the co-pending litigation, Petitioner’s unexplained delay in seeking IPR

review, and the strong settled expectations each weigh strongly in favor of discretionary denial and would be sufficient to warrant denial. However, when these factors are evaluated together, discretionary denial is extremely compelling and should be granted.

For the reasons presented above, Patent Owner respectfully asks that the Director exercise discretion to deny the Petition. No *inter partes* review should be instituted.

Dated: May 18, 2026

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CERTIFICATE OF SERVICE

I hereby certify that on this date, a true and correct copy of the foregoing document was served via email, by consent, to Petitioner by serving the correspondence email addresses of record as follows:

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