

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CARVANA, LLC
Petitioner,

v.

INTERNATIONAL BUSINESS MACHINES CORPORATION
Patent Owner.

Inter Partes Review No.: IPR2025-00564

U.S. Patent No. 7,702,719

**PETITIONER'S OPPOSITION TO PATENT OWNER'S
DISCRETIONARY DENIAL BRIEF**

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1003	Declaration of John K. Bennett, Ph.D., P.E. (“Bennett Decl.”)
1004	U.S. Patent No. 5,838,909 (“Roy”)
1005	U.S. Patent No. 5,695,400 (“Fennell”)
1006	JAVASCRIPT: THE DEFINITIVE GUIDE (Flanagan, David) (Willison, Frank, Ed.) (O’Reilly & Associates, Inc., pub.) (2d. Ed. Jan. 1997) (ISBN: 1-56592-234-4) (“O’Reilly”)
1007	U.S. Patent No. 5,768,510 (“Gish”)
1008	G. Krasner & S. Pope, <i>A Description of the Model-View-Controller User Interface Paradigm in the Smalltalk-80 System</i> , Journal of Object-Oriented Programming, Vol. 1, Jan. 1988 (“Krasner”)
1009	John K. Bennett, The Design and Implementation of Distributed Smalltalk, In <i>Proceedings of the Second ACM Conference on Object-Oriented Programming Systems, Languages, and Applications</i> , Orlando, Florida, October 1987. Special Issue of SIGPLAN Notices, Volume 22, Number 12, December, 1987 (“Bennett”)
1010	D. Decouchant, Design of a Distributed Object Manager for the Smalltalk-80 System. In <i>Proceedings of the ACM Conference on Object-Oriented Programming Systems, Languages, and Applications</i> , Portland, Oregon, October 1986. Special Issue of SIGPLAN Notices, Volume 21, Number 11, November, 1986 (“Decouchant”)

1011	P. L. McCullough, Transparent Forwarding: First Steps, In <i>Proceedings of the Second ACM Conference on Object-Oriented Programming Systems, Languages, and Applications</i> , Orlando, Florida, October 1987. Special Issue of SIGPLAN Notices, Volume 22, Number 12, December, 1987 (“McCullough”)
1012	Maurice Wilkes, Slave Memories and Dynamic Storage Allocation, IEEE Transactions on Electronic Computers, Vol. EC-1.4, Issue: 2, (April 1965) 270-271 (“Wilkes”)
1013	U.S. Patent No. 3,771,137 (“Barner”)
1014	Betz, et al., <i>Developing Highly-Responsive User Interfaces with DHTML and Servlets</i> , RC 21628 (Dec. 20, 1998)
1015	<i>Sotera</i> Stipulation
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1023	Related Litigation (<i>Carvana v. IBM</i> , 7:23-cv-08616, DI 0055, Joint Stipulation of Dismissal as to U.S. Patent 7,072,849) (Mar. 26, 2024)
1024	Related Litigation (<i>Carvana v. IBM</i> , 7:23-cv-08616, DI 0137, Notice Regarding Parties' Unsuccessful Mediation) (Dec. 20, 2024)
1025	Related Litigation (<i>Carvana v. IBM</i> , 7:23-cv-08616, DI 0141, Notice of Petition Seeking <i>Inter Partes</i> Review) (Feb. 3, 2025)
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1030	Related Litigation (<i>Carvana v. IBM</i> , 7:23-cv-08616, Deposition Topic Correspondence Thread) (July 22–August 7, 2024)
1031	<i>Zynga</i> Case (<i>IBM v. Zynga</i> , 22-cv-590-GBW, Excerpt of Trial Transcript) (Sept. 12, 2024)
1032	Related Litigation (<i>Carvana v. IBM</i> , 7:23-cv-08616, DI 0148, Carvana's Motion to Stay Pending <i>Inter Partes</i> Review) (May 7, 2025)
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1034	Related Litigation (<i>Carvana v. IBM</i> , 7:23-cv-08616, DI 0151, Excerpt of Defendant and Counterclaim Plaintiff International Business Machines Corporation's Opposition to Plaintiff and

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I. INTRODUCTION

Carvana’s IPR petition asks the PTAB to fulfill its important role in improving patent quality by culling an expired, invalid patent causing unwarranted litigation costs. This dispute is tailor-made for an IPR to proceed—the Southern District of New York case (“Related Litigation”)¹ is soon-to-be stayed, no trial date has been set, no *Markman* order has issued, and neither expert reports nor expert discovery has begun. Without the PTAB’s intervention, IBM will be rewarded for waiting eleven years to assert the highly questionable patent at issue.

What’s more, in the Related Litigation, IBM asserts two other patents that the PTAB already declared contain twenty-one (21) invalid claims, making this dispute chock-full of broad software patents that frequently draw this Board’s scrutiny.² And here, IBM swapped the ’719 Patent for another it dumped late in

¹ *Carvana, LLC v. International Business Machines Corp.*, Civ. No. 1:23-cv-8616-KMK-VR (S.D.N.Y.); the Southern District of New York is referenced herein as “SDNY.”

² *Ebates Performance Marketing, Inc., d/b/a Rakuten Rewards v. International Business Machines Corp.*, IPR2022-00133, Paper No. 35 (PTAB May 24, 2023) (claims 1, 3–6, 13, and 15–18 of U.S. Patent No. 7,543,234 unpatentable) (not

the game, and now attempts to avoid PTAB review, intoning advancement of the Related Litigation. But the *Fintiv* factors and additional discretionary denial considerations all counsel toward declination of such denial. This IPR should proceed.

To be sure, Carvana has acted diligently pursuing the IPR following unsuccessful efforts to mediate this dispute in late 2024. It promptly filed the subject Petition (“Petition”) against all claims of the ’719 Patent, doing so months before the statutory deadline. This, again, was against the backdrop of the Related Litigation, where the SDNY court has yet to issue a *Markman* ruling, or any other order addressing the ’719 Patent for that matter, with no trial date on the horizon. And to boot, no other forum has considered the combination of prior art set forth in Carvana’s Petition, and there is zero risk of overlapping effort with the Related

appealed); *Ebates Performance Marketing Inc. dba Rakuten Rewards, Zillow Group, Inc. and Zillow, Inc. v. International Business Machines Corp.*, IPR2022-00646, Paper No. 56 (PTAB Oct. 11, 2023) (confirming claims 1–4, 12–16, 18, and 19 are unpatentable) (on appeal at the United States Court of Appeals for the Federal Circuit, Case No. 2024-1170).

Litigation given Carvana's *Sotera* stipulation. Put simply, the PTAB is the forum best suited to confirm whether the '719 Patent survives this compelling art.

Of note, Carvana challenges all of the '719 Patent's twenty-six (26) claims in its Petition. While IBM previously asserted just claim 1 in a jury trial against an unrelated party, Zynga,³ the Petition at bench presents a strong case for the PTAB to find all claims of the patent invalid. More to the point, grounds advanced here include combinations of three prior art references, Roy (Ex.1004), Fennell (Ex.1005), and O'Reilly (Ex.1006)—and only one of these, Roy (Ex.1004)—was raised in *Zynga*. The lay jury there heard only an hour's worth of testimony concerning the '719 Patent's invalidity during what was a four-day-long trial involving two patents; the jury heard nothing about the new prior art references Carvana presents here. With the PTAB's expertise in evaluating patent validity, it is uniquely situated to review the well-known software system and methods claimed in the '719 Patent, further underscoring why *inter partes* review should be properly undertaken by the PTAB.

³ *International Business Machines Corp. v. Zynga Inc., et al.*, Civ. No. 1:22-cv-00590-GBW (D. Del.) ("*Zynga*").

Finally, the Related Litigation is likely to be stayed on Carvana’s pending motion, counseling in favor of institution. Even if Judge Karas bucks his trend of granting stays 84% of the time, or diverges from the SDNY district-level trend of granting 72.5% of requested stays pending IPR—the parties have a long road ahead in the district court.⁴ Given the parties’ (or indeed, the court’s) minimal investment in the late-added ’719 Patent’s invalidity,⁵ the ’719 Patent is ripe for the PTAB’s review. To that end, the projected time to the unset trial is months after the deadline for a final written decision (“FWD”), making this Board’s review an important filter for whether this Patent is invalid for enforcement in the Related Litigation or any other case in the future.

This brings us to why Congress created the PTAB in the first place, to cull low quality patents such as the ’719 Patent at bench.⁶ The importance of this work

⁴ Ex.1020 (Lex Machina statistics on Judge Karas stays); Ex.1021 (Docket Navigator statistics on stays pending IPR in the SDNY).

⁵ It bears repeating: The SDNY court has not issued any orders pertinent to the subject matter of the ’719 Patent, including a *Markman* order. And expert and summary judgment deadlines all flow from when that order issues. Ex.2013.

⁶ See Ex.1018 (Congressional Research Service Report, *The Patent Trial and Appeal Board and Inter Partes Review*, Updated May 28, 2024).

does not wane even in these resource-restricted times, and such review addresses the type of low-quality patents being raised at the eleventh hour against parties like Carvana, which openly launched its accused website in 2013.

In short, this dispute calls for the PTAB's evaluation of this contested patent; neither the *Fintiv* factors nor other considerations counsel otherwise.

II. THERE IS NO *MARKMAN* ORDER, EXPERT PHASE, OR TRIAL DATE IN THE RELATED LITIGATION; THE PTAB WILL BE THE FIRST AND BEST-SUITED TO ANALYZE THE PRIOR ART COMBINATIONS ASSERTED HERE

A. Because IBM Sprung the '719 Patent Late In the Related Litigation, the Parties and the Court Have a Long Road Ahead

After three years of IBM pressuring Carvana to enter a license, with nary a mention of the '719 Patent, Carvana filed a declaratory judgment action on September 29, 2023 for non-infringement. The action primarily related to a lead patent (U.S. Patent No. 7,072,849 ("the '849 Patent")) that IBM routinely enforced in litigation, but ultimately dropped in the Related Litigation. So the 2023 version of the Related Litigation involved the '849 Patent, and U.S. Patent Nos. 7,543,234 ("the '234 Patent") and 7,631,346 ("the '346 Patent"). Related Litigation, ECF 1; Ex.2012 (corrected October 2, 2023 complaint). Despite the '719 Patent's issuance in April 2010, IBM sat on its hands, neglecting to raise it in counterclaims for infringement in December 2023. Ex.1022 (D.I. 36, Dec. 4, 2023 Answer and Counterclaims, asserting only the '849 Patent, '234 Patent, and '346 Patent). And

IBM's then-existing counterclaims admitted the PTAB already found several claims of the '234 and '346 Patents unpatentable. *Id.* at ¶ 47. As to the '234 Patent, IBM did not even appeal the FWD finding ten (10) claims invalid. *Ebates Performance Marketing, Inc., d/b/a Rakuten Rewards v. International Business Machines Corp.*, IPR2022-00133, Paper No. 35 (PTAB May 24, 2023) (confirming claims 1, 3–6, 13, and 15–18 of U.S. Patent No. 7,543,234 unpatentable) (not appealed). IBM did appeal the Board's decision finding invalid eleven (11) claims of the '346 Patent, which remains pending and close to the finish line. *Int'l Bus. Mach. Corp. v. Zillow Group, Inc.*, Case No. 2024-1170 (Fed. Cir.) (pending oral argument).

Five months into the Related Litigation, after receiving Carvana's invalidity contentions over the '849 Patent and Carvana's deposition of two '849 Patent inventors, IBM made the tactical decision to dump the '849 Patent and raise the previously unasserted '719 Patent, anew.⁷ After a walk-away dismissal of the '849 Patent, IBM amended its counterclaim on April 3, 2024 asserting the then-expired '719 Patent. Ex.2014. At the time, Carvana's accused website had been live for eleven years with no threat from IBM.

⁷ IBM dismissed with prejudice all claims relating to the '849 Patent. Ex.1023 (March 26, 2024 entry of dismissal).

Recognizing the late addition of the '719 Patent would complicate the case, the parties requested an extension of the schedule, which was granted. Ex.2015. This, in turn, extended the *Markman* phase (and any *Markman* order from the court, which has yet to come), expert discovery, a required settlement conference and future case deadlines (Ex.2015 at 3), all by IBM's own doing; ultimately the parties agreed (with the court's consent as to timing) to undergo private mediation in mid-December 2024, which failed. Ex.1024. Just a month thereafter, Carvana filed its 80-page Petition on January 31, 2025—challenging *all* claims of the '719 Patent and raising prior art combinations that no other tribunal has ever considered. *See* Ex.2020 (supplemental invalidity contentions; no reference to Fennell (Ex.1005) or O'Reilly (Ex.1006)). Carvana guaranteed that *only* the PTAB would hear arguments concerning these new art combinations given its *Sotera* stipulation. Ex.1015.

And in the Related Litigation, the path forward remains considerable; the revised and governing schedule has yet to reach important benchmarks such as a

Markman order, expert reports/expert discovery, dispositive motions or a trial setting. Ex.2013 (governing schedule).⁸

Promptly after filing its IPR Petition, Carvana informed the district court of its intent to move to stay the Related Litigation the very next business day.

Ex.1025 (“We are conferring with IBM about Carvana’s forthcoming motion to stay this case pending resolution of IPR2025-00564.”); Ex.1026 (Feb. 7, 2025

request for pre-motion conference). Carvana so moved, the SDNY court ordered briefing of the request, and Carvana’s motion will be papered well before any institution decision will issue. Ex.2026 (briefing will complete on June 18, 2025).

Under the SDNY statistics and Judge Karas’ trends, the motion to stay has a 72.5% or 84% likelihood of being granted, respectively.⁹

⁸ While fact discovery has completed, that is more the beginning than the end. That phase occurred regardless of invalidity issues and was largely devoted to the lead patent that IBM vanquished from the case. The parties are not so far down the road that time has been wasted on invalidity issues—to the contrary, invalidity considerations have scarcely proceeded beyond the contentions phase, with two of the important pieces of art at issue in Carvana’s Petition not being raised in the Related Litigation.

⁹ Ex.1021 (Docket Navigator statistics); Ex.1020 (Lex Machina statistics)

B. Key Indicators Predict Trial in the Related Litigation Will Occur Well After a Final Written Decision

Even if the district court bucks its prior trends and does not issue a stay in the Related Litigation, there remains **no trial setting**. Ex.2013 (governing scheduling order; no trial date set; keying expert discovery and summary judgment briefing to after *Markman* order issues). Given that the expert phase begins after issuance of a *Markman* order, all of Judge Karas' key indicators show trial will likely take place well after September 2026, the projected FWD timeline for this IPR.

Of note, IBM breezes by these important facts in the instant motion—based on the current status of the Related Litigation and Judge Karas' specific practices and trends—trial will simply not take place before the FWD as IBM contends. For example, as stated, the Related Litigation currently has no trial setting and the case will very likely be stayed. The next set of deadlines is keyed from the date of any *Markman* order, should one issue absent a stay. Ex.2013 (governing scheduling order). Between 2009 and 2025, Judge Karas' median time to trial was 1,196 days. Ex.1019 (Lex Machina statistics). Even calculating an expected trial date from the first DJ complaint filed in this case on September 29, 2023—before the '719 Patent was added in April 2024— would put the trial into January 2027, four months **after** a FWD. But the more relevant calculation is from the time the '719 Patent

was added to the Related Litigation in April 2024, and with that in mind, the projected trial date would be even later, July 2027. Either way, trial in the Related Litigation will not occur in advance of a FWD, and all of IBM's mathematical obfuscations for potential trial dates does not change this plain-as-day reality. Patent Owner's Brief Seeking Discretionary Denial of Institution Under 35 U.S.C. § 314(a) ("DD Brief") at 18–21.

C. The Parties' Investment Thus Far Only Minimally Relates to the '719 Patent's Validity

Whether focusing on the parties' local patent rule submissions, documents and discovery responses, or depositions, the analysis remains the same—IBM's investment in the '719 Patent's invalidity in the Related Litigation has been minimal.

Contentions: After IBM belatedly added the '719 Patent to the case in April 2024 and served its infringement contentions May 24, 2024 (Ex.2019),¹⁰ it was *Carvana*—not IBM—that invested in the collection, review, and charting of the significant amount of '719 Patent prior art. It was also Carvana that prepared and

¹⁰ Though IBM claims contentions exchanged in the Related Litigation span “thousands of pages,” DD Brief at 9, its '719 Patent infringement contentions were under 200 pages, and IBM did not respond to Carvana's invalidity contentions.

served invalidity contentions, including specific contentions as to Roy. Ex.2020; Ex.2021. In the Related Litigation, the local patent rules do not require patent owners to respond or rebut invalidity contentions, and IBM did not do so. Ex.2013 (citing SDNY Local Pat. R. 7, contemplating invalidity, but not “validity” contentions). Accordingly, IBM’s investment in defending the alleged validity of the ’719 Patent in the Related Litigation has been minimal, and is only forward looking.

Document Production and Written Discovery Responses: Through the course of litigating the three originally asserted patents—before IBM late-swapped the ’719 Patent—IBM and Carvana produced a number of documents and written discovery requests. IBM produced approximately 95% (~400,000 pages of its total ~420,000 pages) of its documents *before* the ’719 Patent was even asserted. Ex.1027 (March 29, 2024 production through Bates page IBM-CARVANA00409290); DD Brief at 9 (IBM’s total production of over 420,000 pages). And IBM does not identify what document production investment it made specific to the ’719 Patent other than admitting that its ’719 production includes reproductions of materials previously produced in the *Zynga* matter—an investment made before the Related Litigation. DD Brief at 6 (“In March and April 2024, IBM produced litigation materials from the *Zynga* litigation to Carvana . . .”).

Accordingly, by its own admissions, IBM's investment in producing documents related to the '719 Patent in the Related Litigation remains minimal.

IBM also made little investment in attempting to uphold the '719 Patent's validity in written discovery responses. None of IBM's interrogatory responses are directed to Carvana's '719 Patent invalidity contentions, and IBM's response regarding secondary considerations of non-obviousness largely references the patents-in-suit, and contains a reservation to supplement with expert opinion, which of course will not occur until much later, after a future *Markman* order. Ex.2013 (scheduling order showing opening expert reports due 80 days after a *Markman* order). This investment is hardly the amount suggested by IBM.

Depositions: Just as IBM inflates its '719 Patent investment in the Related Litigation by lumping voluminous non-'719-Patent related contentions, document production, and written discovery, IBM's supposed '719 Patent deposition efforts are likewise minimal. Importantly, two of the 30 depositions concerned the now-dropped '849 Patent. Ex.2023 (depositions of "Ken" and "Mel" are those of Ken Appleman and Mel Bellar, inventors of the '849 Patent). As to the remaining twenty-eight depositions, only *three* even mentioned the '719 Patent. Ex.1028 (Carvana annotation to IBM's deposition chart (Ex.2023) highlighting only three transcripts that even mention the '719 Patent).

The parties have much work to do with respect to analyzing the invalidity of the '719 Patent in depositions, as IBM punted much of that analysis to the expert discovery phase. For example, on July 12, 2024, Carvana served a Fed. R. Civ. P. 30(b)(6) deposition notice on IBM. Ex.1029 at 11–12. Carvana noticed a topic specific to the validity of the patents in suit, namely:

20. The nature, scope, and content of the Prior Art, including Prior Art identified in Carvana's invalidity contentions and in the prosecution histories of the Patents-in-Suit, all prior and current challenges to the validity of the Patents-in-Suit before the USPTO, PTAB (e.g., IPRs and *ex parte* reexaminations), or federal court.

IBM did not designate a witness to testify on this topic. Instead, the parties agreed this was an “expert topic” and as a result, that testimony will await the commencement of the expert discovery phase, after a *Markman* order issues assuming the case is not stayed. Ex.1030 at 3–5 (emails between Carvana and IBM counsel regarding Carvana's topic 20, characterizing it as an “expert topic”).

Claim Construction: While the parties have completed claim construction briefing in the Related Litigation, the lion's share of that briefing related to patents other than the '719 Patent:

Ex.2024: Claim Construction Brief Excerpts with '719 Patent Contribution Calculated			
Brief	Date	Total Pages	Pages Related to the '719 Patent
IBM's Opening Claim Construction Brief	August 13, 2024	34	12

Carvana's Opening Claim Construction Brief	September 13, 2024	42	12
IBM's Reply Claim Construction Brief	October 1, 2024	29	10
Carvana's Sur-Reply Claim Construction Brief	October 18, 2024	22	8
Totals		127	42

Moreover, any investment in devising constructions of '719 Patent terms has been minimal, as some of those constructions were proposed by IBM in *Zynga* before the Related Litigation even began. *See* Petition at 13. Regardless, claim construction is not relevant to the IPR because as Carvana indicated in the Petition, the '719 Patent claims are invalid under either party's proposed constructions. Petition at 13. As such, both the Court and the parties' investment in claim construction with respect to the '719 Patent's invalidity has not reached maturity. And this Board's constructions will inevitably assist the SDNY court in its *Markman* decision.

D. The *Zynga* Case Only Superficially Addressed Roy on Only 1 of the 26 Claims Challenged here by Carvana

The *Zynga* and Related Litigation bear substantial differences. For example, IBM litigated the *Zynga* case in a different jurisdiction (Delaware versus SDNY), against a different party (not Carvana) and asserted a lead patent that IBM expressly dropped in the Related Litigation (the '849 Patent). Likewise, IBM asserts additional patents in the Related Litigation it declined to assert in *Zynga*

(the '234 and '346 Patents), and in the one overlapping patent (the '719 Patent), only claim 1 of the 26 total claims was involved in *Zynga*.

So too as between *Zynga* and the Petition—the prior art presented in *Zynga* differs from the prior art presented in the Petition, as two key pieces of art identified in Carvana's Petition were never raised in *Zynga* (or for that matter, the Related Litigation). Ex.2009 (*Zynga* jury verdict regarding the '849 Patent and only claim 1 of the '719 Patent); Ex.2020 at 8 (IBM asserts claims 1–4, 8, 10–12, and 26 of the '719 Patent against Carvana in the Related Litigation). Accordingly, *Zynga* differs from this IPR (and the Related Litigation) in significant ways.

And the jury in *Zynga* addressed only the validity of claim 1, not the other twenty-five claims challenged by Carvana in its Petition. Further, the jury in *Zynga* could only superficially analyze Roy and the invalidity arguments based thereon. Dr. John Bennett's testimony in *Zynga*—which covered '719 Patent non-infringement, licensing, and invalidity at trial—lasted only about an hour during the course of what was a four-day trial.¹¹ Ex.1031 at 82:11–16; 94:16–102:9;

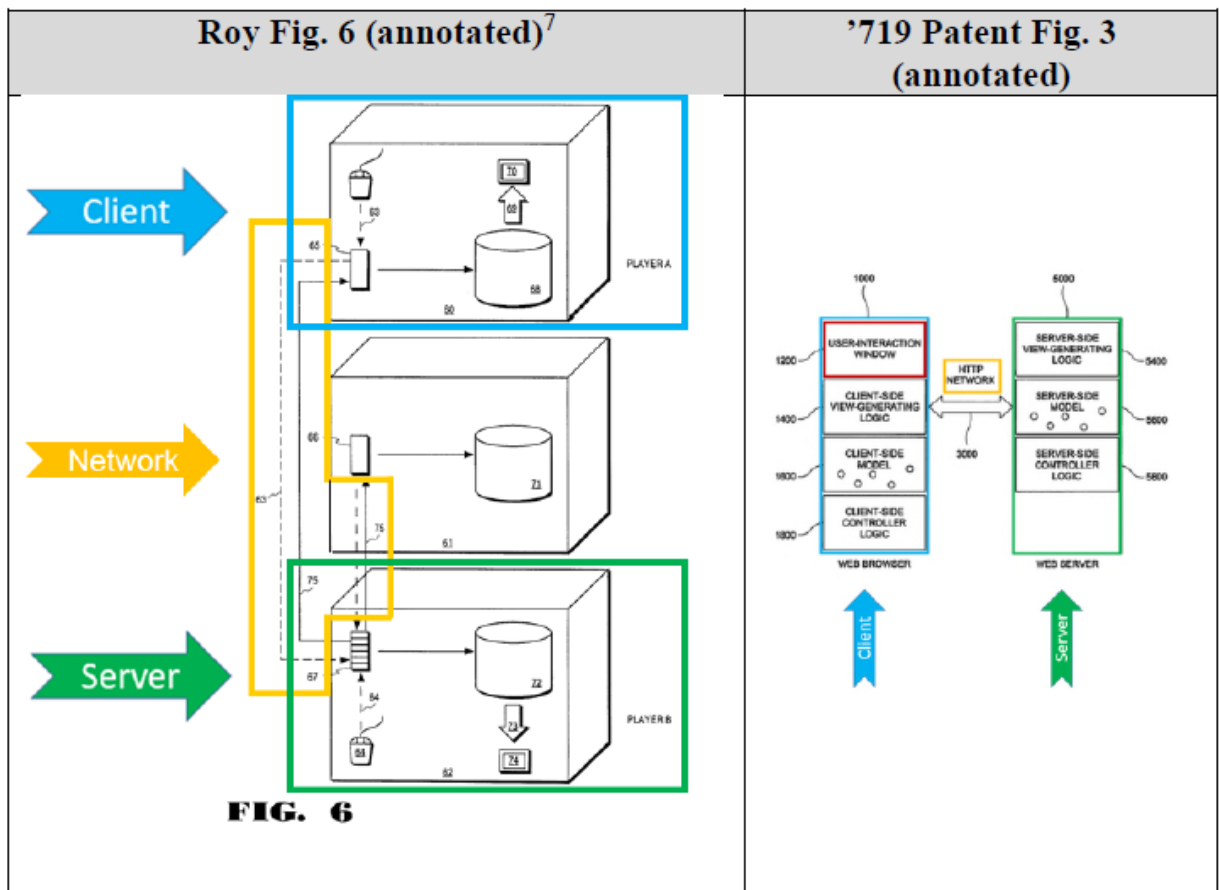
¹¹ Because the transcript does not have time stamps indicating Dr. Bennett's testimony directly, Carvana estimated Dr. Bennett's testimony timing based on the following: Dr. Bennett testified on the last day of testimony before the lunch break.

107:9–108:25; 110:23–111:8; *see also id.* at 86:3–94:15 (Dr. Bennett’s testimony discussing noninfringement and licenses).

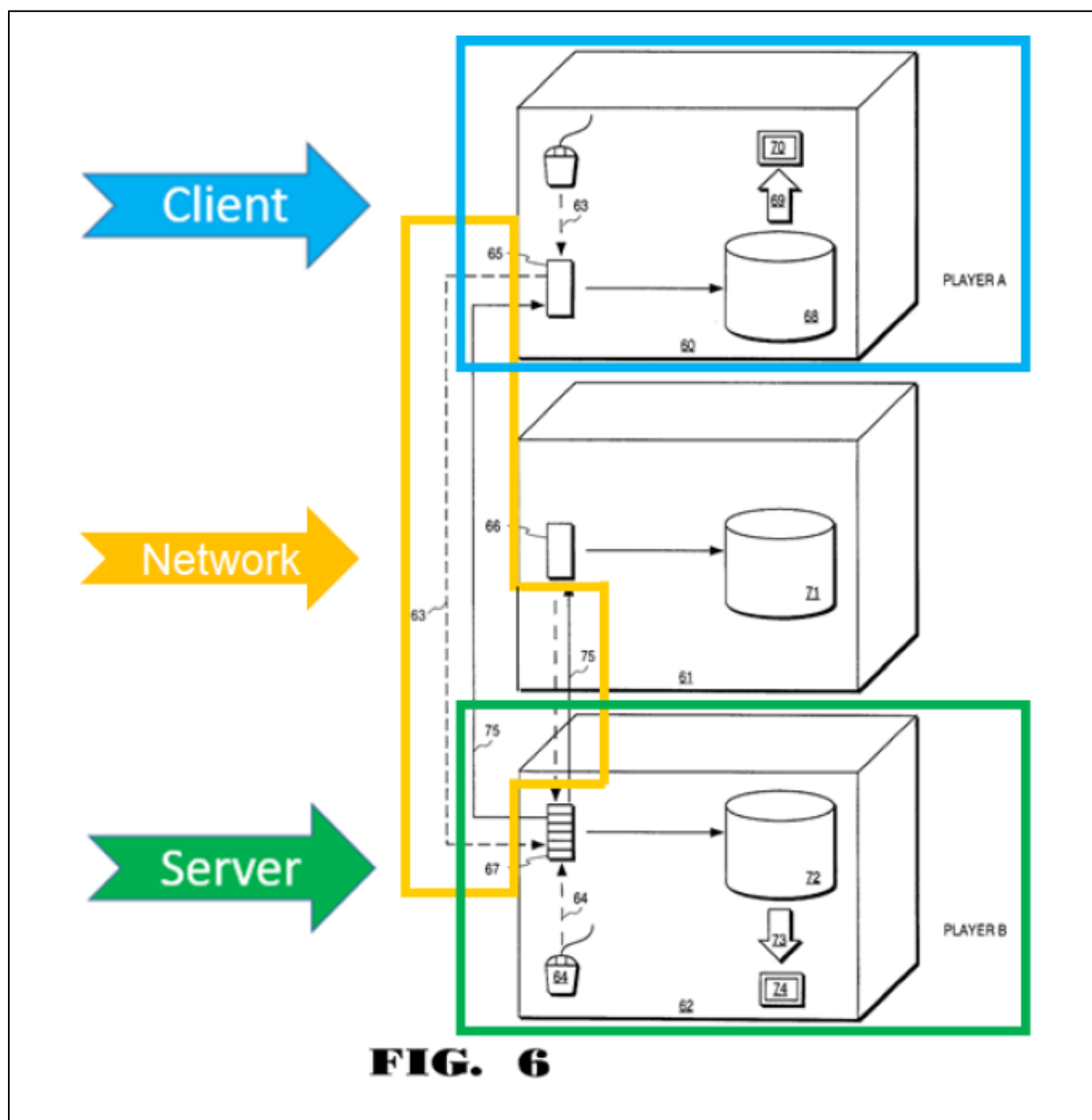
Zynga and Dr. Bennett were not, in that short period, accorded the time to fully explain why the ’719 Patent is anticipated and/or rendered obvious by Roy, as Carvana does in its Petition. For instance, Dr. Bennett’s testimony did not explain all the reasons why and how Roy is analogous art to the ’719 Patent, namely, that they both seek to reduce client/server interactions by enabling both server and client to process events locally whenever possible to solve the problem of reducing latency when synchronizing access to a networked database. Petition at 14, 42 (discussing Fig. 8A). In addition, Dr. Bennett did not expressly explain how Roy, like the ’719 Patent, discloses a “dual-model-view-controller” architecture as claimed in claim 1. *See* Ex.1031 (Dr. Bennett testimony does not reference Roy’s “dual-MVC” architecture); Petition at 14. Dr. Bennett likewise did not present at

The jury entered the trial room at 9:32 AM, and lunch was called at 1:03 PM, or approximately 3.5 hours. During that time, Dr. Kevin Almeroth’s testimony spanned 71 pages of transcript (55%), Dr. Bennett’s testimony 31 pages of transcript (24%) and Mr. Douglas Kidder 26 pages of the transcript (21%). Twenty-four percent of 3.5 hours is around 50 minutes. Ex.1031 (September 12, 2024 Zynga trial transcript).

trial the same annotations to Figure 6 as presented in Carvana's Petition, which clearly show each element claimed in the '719 Patent's independent claims exist in Roy, because in Roy, one user's computer acts as the "server" of the system, and another user's computer acts as the "client," connected by a network:



Petition at 16; *compare, e.g.*, Ex.2007 at 17 (Dr. Bennett's prior declaration presenting un-annotated Fig. 6).



Petition at 32.

Dr. Bennett also did not discuss during his brief '719 Patent invalidity testimony the full scope of Roy's disclosure, including *why* Roy discloses the limitation of "configuring the server to store a model associated with the

application and to execute view-generating and controller logic associated with the application,” Ex.1001 at claim 1, and *why* the Roy system is not “client-to-client” as IBM now asserts. DD Brief at 35–36. In contrast, four pages of the Petition very clearly explain how the computer acting as the server **changes** while users engage the Roy system. For purposes of mapping onto the claim limitations, computer 62 (the green box) *is* the “server.” *See* Petition at 16–19 (“While one embodiment of Roy described in Fig.5A uses computer 61 “initially” as a “central server,” in Fig.6 the master event server and master database (i.e., the “server”) have migrated to the most active user, and computer 62 is now the master server.”). The Roy “server” thus meets all of the server-related limitations of the independent claims as explained in Carvana’s Petition. Petition at 30–45.

And Dr. Bennett did not have the opportunity to discuss all of Roy’s disclosure detailing *how* the computer acting as the server changes, unlike the Petition. *See, e.g.*, Ex.1004 at 8:60–9:5 (“Event server 66 was *initially* the master event server. However, once event server 67 in *computer 62 becomes the master event server*, it becomes more efficient for slave event server 65 to connect directly to event server 67 (Fig. 6).”) (emphasis added); Petition at 17. Further, Dr. Bennett did not have the opportunity to provide the same fulsome explanation in the Petition of how both the server and client of Roy “locally maintain at least a portion of the model and execute the view-generating and controller logic

associated therewith,” because *every* computer in the system—whether acting as client or server—has the model-view-controller. Petition at 43 (discussing independent claim limitation (d)).

Although Roy was not analyzed in depth during the one hour of ’719 Patent related testimony during the *Zynga* trial, Carvana’s 80-page Petition maps its detailed disclosure onto all the claims of the ’719 Patent. The PTAB’s expert analysis of the Petition provides the appropriate forum to analyze how and why Roy anticipates and/or renders obvious claim 1 of the ’719 Patent.

Plainly, the scope of *Zynga*, the Related Litigation, and the Petition thus *differ* substantially. The Petition addresses the validity of all twenty-six claims of the ’719 Patent based on art beyond Roy (e.g., Fennell and O’Reilly). The *Zynga* case did not, involving only claim 1 and only Roy, with a paltry hour of testimony to a lay jury:

Ground	Claim(s)	Reference(s)	Basis
1	1, 13, 25, 26	Roy	§102
2	1, 13, 25, 26	Roy	§103
3	2, 4–12, 14, 16–24	Roy, Fennell, and O’Reilly	§103
4	3, 15	Roy and Fennell	§103

Petition at 3 (annotated). And to be sure, Fennell and/or O’Reilly render every dependent claim obvious. Just as an example, claims 3 and 15, which depend from claims 1 and 13, respectively, merely require that the method/system of those

claims be performed “in accordance with browser software running thereon.”

Ex.1001 at claims 3 and 15. Fennell plainly discloses an application that is deployed over a browser. Ex.1005, 3:11–15 (describing the system run on a “World Wide Web browser with software ‘applets’”).

In the same way, O’Reilly discloses all of the ’719 Patent dependent claims’ implementations in JavaScript. For example, claims 7 and 9 require the use of “not a visible frame,” in other words, an *invisible* frame. Ex.1001 at claims 7 and 9.

O’Reilly not only discloses the use of invisible frames, it even teaches precisely how to code them. Ex.1006 at 208–209 (“But what if your design calls for all the frames to be dynamic? A static frame is still required, but the trick here is to create the static frame so that it is invisible! You do this by explicitly creating it at a location that is greater than 100% of the frame width or height. HTML to create such an invisible frame is shown in Example 12-5.”).

Given the technical disclosures that the Petition presents, the expanded claims at issue, and the new art never before reviewed in *Zynga* or the Related Litigation, the PTAB is the best-suited forum to address the validity of all claims of the ’719 Patent, in view of all of the prior art that render those claims invalid.

III. THE DIRECTOR SHOULD INSTITUTE *INTER PARTES* REVIEW

In the same way that the PTAB has already determined that two of the asserted patents in the Related Litigation contain unpatentable claims, the PTAB

should institute this proceeding to perform the same quality control on the '719 Patent.

A. Discretionary Denial Standards

The PTAB takes a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review. *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper No. 11 at 6 (PTAB Mar. 20, 2020) (precedential). The following factors govern.

1. The *Fintiv* Factors

To evaluate whether to institute a trial in view of a parallel proceeding, the PTAB considers the following *Fintiv* factors:

1. whether the court granted a stay or evidence exists that one may be granted in a proceeding is instituted;
2. proximity of the court's trial date to the Board's projected statutory deadline for a final written decision;
3. investment in the parallel proceeding by the court and the parties;
4. overlap between issues raised in the petition and in the parallel proceeding;
5. whether the petitioner and the defendant in the parallel proceeding are the same party; and
6. other circumstances that impact the Board's exercise of discretion, including the merits.

Id. at 6.

2. *Sotera* Stipulations Remain “Highly Relevant” to the *Fintiv* Analysis

Carvana’s *Sotera* stipulation (Ex.1015) remains highly relevant to the *Fintiv* favor 4 analysis, despite IBM’s baseless assertion to the contrary. DD Brief at 12–13. The March 24, 2025 Memorandum on the rescission of “Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation” (“March 24 Memo”) confirms this very point, noting a Petitioner’s *Sotera* stipulation remains “highly relevant” to the holistic analysis under *Fintiv*. March 24 Memo at 3; *Adobe Inc. v. Jaffe*, IPR2024-01352, Paper 8 at 12 (PTAB Mar. 7, 2025) (confirming petitioner’s *Sotera* stipulation “weighs strongly in favor of not exercising discretion to deny institution”); Paper 12 (PTAB Apr. 17, 2025) (denying Director review on, *inter alia*, *Fintiv* analysis); *Mobileye Global, Inc. v. Facet Technology Co.*, IPR2024-01110, Paper 16 at 15 (PTAB Mar. 5, 2025) (petitioner’s *Sotera* stipulation weighs strongly against exercising discretion to deny institution); *Mobileye Global*, IPR2024-01110, Paper 20 (PTAB Apr. 22, 2025) (denying patent owner’s request for rehearing).

3. Additional Discretionary Considerations

The March 26, 2025 Memorandum on the “Interim Processes for PTAB Workload Management” (“March 26 Memo”) provides additional considerations the parties may address:

- Whether the PTAB or another forum has already adjudicated the validity or patentability of the challenged patent claims;
- Whether there have been changes in the law or new judicial precedent issued since issuance of the claims that may affect patentability;
- The strength of the unpatentability challenge;
- The extent of the petition's reliance on expert testimony;
- Settled expectations of the parties, such as the length of time the claims have been in force;
- Compelling economic, public health, or national security interests; and
- Any other considerations bearing on the Director's discretion.

March 26 Memo at 2–3. These factors, too, support instituting this IPR to positively impact the efficiency and integrity of the patent system. *Fintiv* at 16.

B. The *Fintiv* Factors, Including Carvana's *Sotera* Stipulation, Favor Institution

In the Related Litigation, as stated, no *Markman* order has issued, expert discovery has not begun and no trial date has been set; likewise Carvana's Petition challenges an expanded set of claims using never-before-addressed prior art. Under these circumstances, the *Fintiv* factors clearly favor institution.

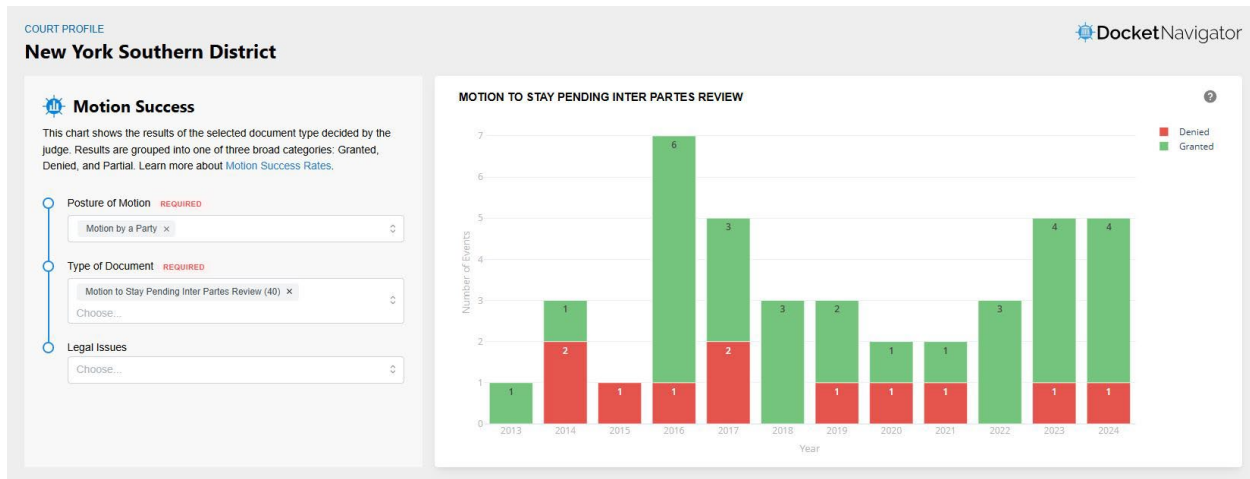
1. *Fintiv* Factor 1: The District Court Is Likely to Enter a Stay, Favoring Institution

The SDNY court is likely to enter a stay in the Related Litigation, favoring institution. And only the Related Litigation—not *Zynga*—is relevant to any *Fintiv*

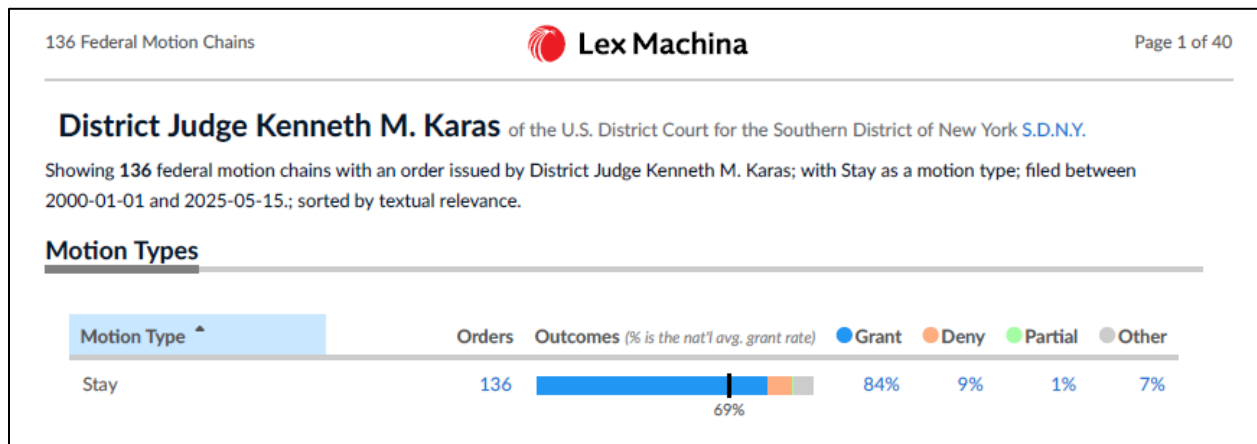
analysis because the Petition addresses all claims of the '719 Patent, not just claim 1, and presents grounds which no other forum has reviewed.

As to the relevant comparison, the Related Litigation, Carvana informed the SDNY court of its intent to request a stay the very next business day after filing its Petition. Ex.1025 (D.I. 141). Briefing on the motion to stay will be complete on June 18, 2025. Ex.2026. The Related Litigation is likely to be stayed given the SDNY and Judge Karas grant stays the vast majority of the time and Carvana's Motion is particularly strong, indeed well supported by analogous case law.

The SDNY has granted stays in 72.5% of cases pending IPR proceedings over the past twelve years, according to Docket Navigator statistics:



Ex.1021. And Judge Karas has granted stays in 84% of motions to stay over the past twenty-five years:



Ex.1020.¹² This is “persuasive evidence that there is a good reason to believe that a stay will be granted.” *Twitch Interactive, Inc. v. Razdog Holdings LLC*, IPR2025-00307, IPR2025-00308, Paper 18 at 2 (PTAB May 16, 2025) (Director’s decision denying Patent Owner’s request for discretionary denial, in part due to courts in the relevant district granting stays in 76% of post-institution requests and the particular judge’s statistics granting stays in all requests).

Carvana’s motion for a stay is particularly strong. Ex.1032. A stay in the Related Litigation would simplify the issues because the PTAB may confirm that all claims of the ’719 Patent are unpatentable, including the several asserted against Carvana. *Id.* at 6–10. The stay is well-timed given the stage of the

¹² The PTAB considers Lex Machina statistics when applying the *Fintiv* factors. *See, e.g., Sony Interactive Entertainment LLC v. Quantum Imaging LLC*, IPR2023-00954, Paper 11 at 26 (PTAB Dec. 11, 2023).

proceedings in the Related Litigation (no *Markman* order has issued, no expert reports or expert discovery, and no trial has been set). *Id.* at 11–12. IBM cannot be prejudiced by a stay in the Related Litigation because it waited eleven years to even assert the long-expired '719 Patent against Carvana's website that had been in operation since 2013 (and no forward looking '719 Patent damages exist given patent expiration). *Id.* at 13–20.

Despite IBM's arguments suggesting the merits of the Petition will inform the stay decision in the Related Litigation, (DD Brief at 15 n.5), courts ***do not address*** the merits of the IPR when deciding motions to stay. *See Rensselaer Polytechnic Institute v. Apple Inc.*, Case No. 13-cv-0633-DEP, 2014 WL 201965, at *8 (N.D.N.Y. Jan. 14, 2014) (noting that there is “no authority” to suggest “that a court, lacking the expertise of the PTO, should examine the strength of a petitioner's claims of invalidity asserted in an IPR petition when addressing a motion to stay.”); *Audio MPEG, Inc. v. Hewlett-Packard Comp.*, Case No. 15-cv-73, 2015 WL 5567085, at *5 (E.D. Va. Sept. 21, 2015) (noting explicitly that “a district court should not consider whether the PTAB will ultimately grant review when deciding a motion to stay”); *Weserve Drone, LLC, v. SZ DJI Technology Co., Ltd.*, Case No. 19-CV-04382-AB, 2020 WL 4373365, at *3 (C.D. Cal. Mar. 17, 2020); *cf. VirtualAgility Inc. v. Salesforce.com, Inc.*, 759 F.3d 1307, 1313 (Fed.

Cir. 2014) (noting that “district courts have no role in reviewing [PTAB] determinations regarding [] patentability of claims”).

IBM also argues that because the Related Litigation involves two additional patents (that the PTAB already confirmed contains twenty-one (21) unpatentable claims), this somehow affects the Related Litigation’s stay. Not so. SDNY courts grant stays when only one of multiple asserted patents are challenged in an IPR. *See, e.g., Deckers Outdoor Corp. v. Next Step Group, Inc.*, Case No. 23-cv-2545-ALC-VF, 2024 WL 1077875 at *2 (S.D.N.Y. Feb. 29, 2024) (granting stay when IPR petition was filed on only one of the four patents at issue).

Moreover, the Related Litigation will also be affected by any decision from the Federal Circuit on the ’346 Patent. Claims 1, 12, 13, and 14 of the ’346 Patent were found not patentable by the PTAB, but IBM nevertheless asserted them against Carvana in the Related Litigation Ex.1032 at 9 n.5. IBM is both appealing the PTAB’s decision confirming that claims 1–4, 12–16, 18, and 19 are unpatentable, at the same time defending third party Zillow’s cross-appeal that the remaining claims *are* patentable. Ex.1032 at 9–10. The Related Litigation is further likely to be stayed in view of the Federal Circuit’s decision on appeal.

Accordingly, the requested stay is very likely here, and thus factor 1 favors institution. *Twitch Interactive, Inc. v. Razdog Holdings LLC*, IPR2025-00307, IPR2025-00308, Paper No. 18 (PTAB May 16, 2025) (Acting Director decision

confirming statistics showing likelihood of stay counsels against exercising discretion to deny petition).

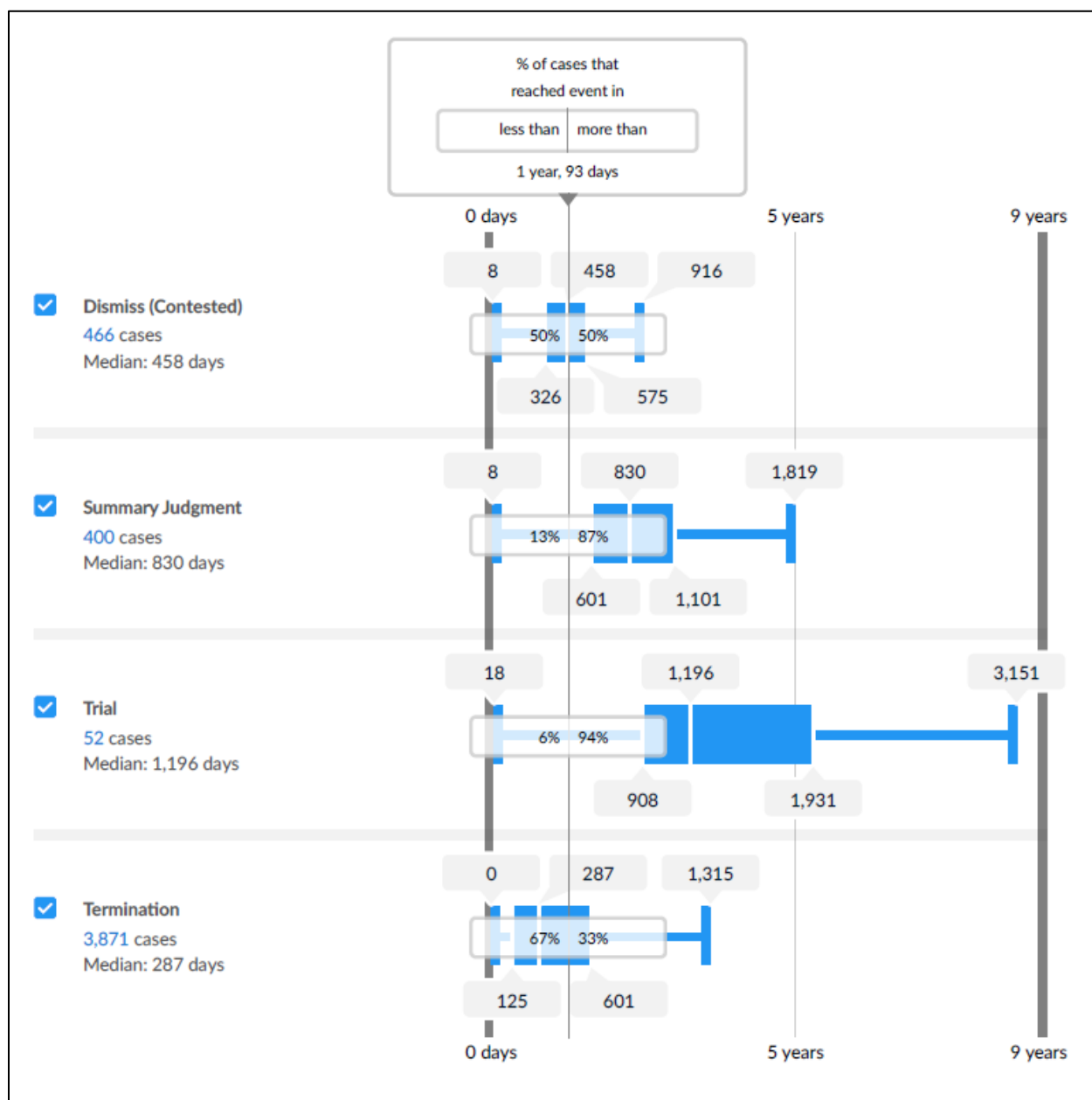
2. *Fintiv* Factor 2: No Trial Date Has Been Set and Any Trial Inevitably will Take Place after a Final Written Decision, Favoring Institution

Factor 2 relates to the proximity of “the court’s” trial date to the Board’s projected statutory deadline for a FWD. To repeat, *no* trial date is set in the Related Litigation. Far from it: the Related Litigation does not have a *Markman* order and expert reports and discovery are far into the future, let alone dispositive motions and pre-trial practice. *Twitch Interactive, Inc. v. Razdog Holdings LLC*, IPR2025-00307, IPR2025-00308, Paper No. 18 (PTAB May 16, 2025) (Acting Director not exercising discretion to deny petition when there was “no currently scheduled trial date in the co-pending district court litigation”).

Absent a trial setting, the best guess for a trial date in the Related Litigation is some point well into 2027, far past the FWD deadline of September 2026. If the SDNY court does not stay the Related Litigation, a likely outcome is that the *Markman* order would issue in late 2025 or early 2026, triggering the 161-day expert report and discovery period that would end in mid-2026. Ex.2013. Summary judgment motions that follow would be unlikely decided until at least very late 2026 or early 2027, making trial impossible before January 2027, which again is well past the FWD deadline. While IBM appears to suggest in a recent filing this is

the SDNY court's failure to manage its docket (*see* Ex.1034 at 4 (IBM's Response to Carvana's motion to stay pending IPR)) the reality is the SDNY court has several civil and criminal matters that predate the Related Litigation, the timing of the court's docket is not for IBM to judge, and IBM's late addition of the '719 Patent (and failure to raise it beforehand) did not help the situation at hand.

In any event, even considering Lex Machina civil case statistics in the context of the Related Litigation, Judge Karas' median time to trial is 1,196 days, suggesting that trial will take place well after the FWD (calculating time to trial from April 3, 2024 when IBM asserted the '719 Patent to estimated trial 1,196 days thereafter, **July 2027**, *ten months* after a FWD in September 2026):



Ex.1019; *See BOE Tech. Grp. Co., Ltd. v. Optronix Sciences, LLC*, IPR2024-01133, Paper 16 at 10 (PTAB Jan. 27, 2025) (granting institution in part because particular judge’s median time-to-trial statistics showed that trial would likely happen after a FWD).

IBM's strained math makes little sense and has no application here. DD Brief at 18–21. IBM argues Docket Navigator shows a median time-to-trial of 28 months in the SDNY and speculates trial in the Related Litigation will take place in January 2026. DD Brief 18-20. IBM's math and corresponding argument is preposterous for a number of reasons, the least of which is the assumption the Related Litigation will reach milestones that cannot be met under the current circumstances. *To wit*: IBM itself acknowledges briefing on the motion to stay will not be complete until June 18, 2025, and then the court “will likely schedule a hearing for the parties to present oral argument.” *Id.* at 15. Assuming that hearing takes place a month after the completed briefing (in July 2025), and is denied, the next milestone would be the Court's issuance of a *Markman* order. Even if the court denies Carvana's motion to stay and remarkably issues a *Markman* order on the same day in July 2025, the resulting 161-day period of expert reports and discovery would not conclude until December 2025. Ex.2013. Trial in this case obviously cannot take place just one month later—before any *Daubert* and summary judgment briefing, let alone a pre-trial statement and orders.

IBM further projects its flawed math onto how long a hypothetical summary judgment briefing period might take. IBM includes unreasonable built-in assumptions that the parties would prepare summary judgment briefs within 21 days following expert discovery and the court would decide those motions and the

parties would be prepared for trial 90 days later. DD Brief at 21. These fanciful schedules are not relevant to the analysis. “[T]he best approach would be not to speculate about when a trial would occur . . . [b]ecause there is no actual trial date scheduled . . . factor 2 does not weigh in favor of discretionary denial.” *Nikon Corp. et al. v. Optimum Imaging Techs., LLC*, IPR2024-01374, Paper 19 at 15–16 (PTAB Apr. 29, 2025).

Even if IBM’s math was correct, simply because a trial may happen before a FWD is not dispositive on institution. *See Samsung Electronics Co., Ltd. v. Harbor Island Dynamic, LLC*, IPR2024-01402, Paper 14 (PTAB Apr. 22, 2025). There, Judge Ankenbrand, performing the duties of the Director Review Executive rejected the argument that a trial scheduled four months before a FWD was sufficient to exercise discretion to deny institution. *Id.* (on Director Review, not disturbing institution decision when trial in the related proceeding was scheduled to occur four months before FWD).¹³

¹³ *See also TCL Electronics Holdings Ltd. v. Maxell, Ltd.*, IPR2025-00120, Paper 9 at 6–7 (PTAB May 20, 2025) (trial scheduled **eight months** before FWD; IPR instituted); *Sand Revolution II, LLC v. Cont’l Intermodal Group-Trucking LLC*, IPR2019-01393, Paper 24 at 8-10 (PTAB June 16, 2020) (trial scheduled **four**

IBM further stumbles on this factor by suggesting the wrong “court” in its argument. The *Zynga* tribunal is not the relevant “court” given the lack of unity of parties, art, and claims. Clearly, significant differences are presented in the Petition from *Zynga* and the relevant “trial date” is what exists if any in the Related Litigation, not an already-concluded, dissimilar trial involving another party. *See supra* § II.D. And to be clear, the relevant “court,” the SDNY court in the Related Litigation, has not set trial, which is perhaps why IBM props up another unrelated case in another jurisdiction to advance its meritless argument (notwithstanding using statistics for the SDNY court to guess at a trial date).

IBM’s reliance on *Fitbit Inc. v. Philips North Am. LLC* and *Mylan Laboratories Ltd. v. Janssen Pharmaceutical Nv* is sorely misplaced. DD Brief at _____

months before the FWD date; institution granted); *NetNut Ltd. v. Bright Data Ltd.*, IPR2021-01492, Paper 12 at 10-11 (PTAB Mar. 21, 2022) (trial date scheduled **six months** before FWD; institution granted); *Protect Animals With Satellites v. OnPoint Sys., LLC*, IPR2021-01483, Paper 11 at 12-13 (PTAB Mar. 4, 2022) (trial date scheduled **two months** before FWD; institution granted); *Verizon Bus. Network Servs. Inc. v. Huawei Techs. Co. Ltd.*, IPR2020-01141, Paper 12 at 8-10 (PTAB Jan. 14, 2021) (trial date scheduled **three and a half months** before FWD; institution granted).

17–18. Both decisions are inapposite. *Fitbit Inc. v. Philips North Am. LLC*, IPR2020-00828, Paper 13 (PTAB Nov. 3, 2020) and *Mylan Laboratories Ltd. v. Janssen Pharmaceutical Nv*, IPR2020-00440, Paper 17 (PTAB Sept. 16, 2020) considered third party trials scheduled to occur before the FWD. But central to the analyses was the fact that the ***same claims*** of the relevant patent were asserted in the third-party cases. *Fitbit* at 13; *Mylan* at 9–11 (emphasis added).

Not so here. *Zynga* addressed *only* claim 1, whereas all claims are challenged in the Petition. Accordingly, *Zynga* is not relevant to the factor 2 analysis. Accordingly, because there is no trial date, and given any trial in the relevant “court” in the Related Litigation will occur after the FWD, factor 2 favors institution.

3. *Fintiv* Factor 3: The Parties Have a Long Road Ahead in the Related Litigation, Favoring Institution

Factor 3 relates to the investment in the parallel proceeding by the court and the parties. As stated above, because no *Markman* order has issued, expert reports have not been exchanged, expert discovery has not taken place, summary judgment briefing has yet to happen, and trial has not been scheduled in the Related Litigation, this factor favors institution. Ex.2013. *See, e.g., Google LLC et al. v. Mullen Industries LLC*, IPR2025-00018, Paper 14 at 11–12 (PTAB May 12, 2025) (instituting IPR after infringement and validity contentions were exchanged and

claim construction briefing was complete, because “much work remain[ed] in the district court case as it relate[d] to invalidity”).

Further, the PTAB has repeatedly evaluated the investment made by the court and parties in addressing the validity of the patent in the *parallel* court action when applying this *Fintiv* factor. *See Sand Revolution II, LLC v. Continental Intermodal Group-Trucking LLC*, IPR2019-01393, Paper 24 at 10 (June 16, 2020) (granting rehearing and instituting IPR when “the district court and the parties ha[d] not invested substantially in the merits of the invalidity positions”); *Samsung Elecs. Co., Ltd. v. Headwater Research LLC*, IPR2024-01396, Paper 13 at 7 (Apr. 1, 2025) (instituting IPR, noting relevance of what extent of “work involv[ed] in invalidity”); *Canadian Solar Inc. v. Maxeon Solar Pte., Ltd.*, IPR2024-01039, Paper 13 at 33 (Jan. 14, 2025) (instituting IPR where the district court had not “issued any substantive orders related to the [] patent [at issue] or the prior art set forth in the [IPR] Petition”); *Unified Patents, LLC v. Monarch Networking Solutions LLC*, IPR2020-01708, Paper 28 at Appx. A, 16 (PTAB June 14, 2021) (instituting IPR, taking into account the “minimal investment in the Cisco trial as it relate[d] to issues of patent validity”); *Lab. Corp. of Am. Holdings v. Ravgen, Inc.*, IPR2021-01054, Paper 11 at 18 (Nov. 5, 2021) (instituting IPR where “investment in the [] lawsuit, particularly as related to any validity issues, ha[d] been low” and “most of the investment . . . on invalidity issues, still [lied] ahead”); *Lab. Corp. of*

Am. Holdings v. Ravgen, Inc., IPR2021-00902, Paper 13 at 19–20 (Nov. 5, 2021) (same); *Delta T LLC v. Macroair Techs, Inc.*, IPR2021-01214, Paper 10 at 9 (Dec. 16, 2021) (instituting IPR when although a significant investment had been made in the district court proceeding as a whole “there [wa]s much work left to do on the merits of the invalidity challenge with expert reports [and] expert discovery”).

As discussed above, much of both the Court’s and parties’ work on invalidity of the ’719 Patent lies ahead. And IBM cannot credibly argue otherwise (see § II.C, above). Accordingly, the parties have a long way left to go in the Related Litigation.

The status of the claim construction process also counsels towards institution. *Fintiv* observed that if, “at the time of the institution decision, the district court has not issued orders related to the patent at issue in the petition, this fact weighs against exercising discretion to deny institution under *NHK*.” *Fintiv* at 10. That is precisely the case here—no *Markman* order has issued. *See also Nikon Corp. et al. v. Optimum Imaging Techs., LLC*, IPR2024-01374, Paper 19 at 18 (PTAB Apr. 29, 2025) (no *Markman* order weighs against exercising discretion to deny).

Finally, the timeliness of Carvana’s Petition further favors institution. After IBM’s eleven-year delay asserting the ’719 Patent in April 2024, Carvana diligently prepared invalidity contentions in July 2024, deposed the ’719 Patent

inventors by August 2024, and conducted mediation in December 2024. Ex.1032 at 22. Only after the mediation failed did Carvana submit its Petition, challenging all claims of the '719 Patent including two new pieces of prior art, months before the statutory deadline to do so. On these facts and given the stage of the Related Litigation, Carvana's Petition was timely.

IBM cites *Google LLC v. Agis Software Dev., LLC*, IPR2020-00871, Paper 16 at 13–14 (PTAB Nov. 25, 2020) and *Comcast Cable Comms LLC v. Touchstream Techs, Inc.*, IPR2024-00326, Paper 13 (PTAB July 26, 2024) to nevertheless argue Carvana's Petition was not timely. DD Brief at 25–26. But both cases are distinguishable for many reasons. For example, in *Google*, the PTAB denied institution because the petitioner's motion to stay had already been denied in the parallel district court proceeding, and trial was scheduled to occur seven months before the projected FWD deadline. *Id.* at 9–10. But here, a stay is likely to be granted and trial has not been scheduled. Further, in *Google*, the subject petition was substantially the same as other IPR petitions that had already been filed. Here, in contrast, the '719 Patent has not been considered by the PTAB and Carvana's Petition presents two pieces of prior art that have never been considered by any tribunal.

Likewise, *Comcast* is inapposite. There, the PTAB denied institution because expert discovery had closed before the deadline for institution, and a trial

was scheduled eight months before the FWD would issue. *Comcast* at 9–10. Here, expert discovery has not even begun in the Related Litigation and no trial has been scheduled. Carvana’s Petition is thus timely. *See, e.g., Google LLC v. Mullen Industries LLC*, IPR2025-00018, Paper 14 at 11 (PTAB May 12, 2025) (instituting IPR filed even nine months after complaint and five months after infringement contentions).¹⁴

¹⁴ The other cases IBM cites on *Fintiv* factor 3 are equally distinguishable. *Roku, Inc. v. Ioengine, LLC*, IPR2022-01553, Paper 11 at 11–12 (PTAB May 5, 2023) (no party requested a stay pending IPR, trial was scheduled six months prior to a projected FWD due date, expert discovery would have been nearly complete, and the petition did not submit a *Sotera* stipulation); *10X Genomics, Inc. v. President & Fellows of Harvard College*, IPR2023-01299, Paper 15 at 9, 17 (PTAB Mar. 7, 2024) (a 43-page *Markman* order had already issued in the parallel proceeding and trial was expected to occur five months before the project FWD due date); *Samsung Electronics Co., Ltd. v. Truesight Communications LLC*, IPR2024-01477, Paper 12 at 10–12 (PTAB Apr. 21, 2025) (motion to stay the parallel proceeding had been denied, trial was set to begin six months before the projected FWD due date, and the deadline to serve expert disclosures was less than a month away).

The parties' long road ahead and the court's lack of any substantive '719 Patent rulings counsels against discretionary denial. A similar case is illustrative: in *Duke Manufacturing Co. v. Low Temp Industries, Inc.*, IPR2021-00413, Paper 57 (PTAB Apr. 6, 2022), the PTAB denied a rehearing request of a decision to institute an IPR. There, the Patent Owner argued that because the district court had made a significant investment in the validity of the challenged patent, the IPR should not have been instituted. *Id.* at 4. The court had issued a preliminary injunction order with regard to the patent under challenge, after receiving full discovery on validity, thousands of pages of briefing and evidence, and a hearing where it heard live testimony from the parties and their experts. *Id.* Even though this work had been done, on a rehearing request, the PTAB reasoned that institution was nevertheless proper given that "much work remained to be done in the district court proceeding." *Id.* at 5. Here, just as in *Duke Manufacturing Co.*, much work remains to be done regarding invalidity of the '719 Patent in the Related Litigation. Accordingly, factor 3 strongly favors institution.

4. *Fintiv* Factor 4: The Petition Presents Materially Different Grounds from the Related Litigation, and Carvana's *Sotera* Stipulation Guarantees There Will Be No Overlap Between this IPR and the Related Litigation

Factor 4 relates to the degree of overlap between issues raised in the petition and in the related proceeding, which in many cases is "highly fact dependent."

Fintiv at 12–13. Given that the Petition challenges claims never before challenged, on art no other tribunal has reviewed, and Carvana provided a *Sotera* stipulation to ensure that only the PTAB would hear these arguments, factor 4 strongly favors institution.

IBM’s attempts to shift focus away from the soon-to-be-stayed Related Litigation by arguing *Zynga* is a “parallel proceeding” is wrong for many reasons.

First, the art presented in *Zynga* is different—only one of the three references, Roy, overlaps. Petition at 3 (Fennell and/or O’Reilly involved in Grounds 3–4). Further, the *Zynga* jury only addressed claim 1 of the ’719 Patent. Ex.1031 at 82:13–16; 94:16–102:9; 107:9–108:25; 110:23–111:8. The Petition, in contrast, challenges all twenty-six claims. Petition at 3. In *Klein Tool, Inc. v. Milwaukee Electric Tool Corp.*, IPR2024-01400, Paper 17 (PTAB Apr. 8, 2025), the PTAB instituted review even though an ITC trial on the same patent had already concluded. Under the factor 4 analysis, the reasoning was two-fold in favor of institution: (1) the *prior art* at issue in the ITC and the petition was different and (2) the *challenged claims* were different. *Klein* at 16–18. Both factors similarly counsel towards institution here. Neither Fennell nor O’Reilly were raised in either the *Zynga* or Related Litigation. And the Petition addresses *all* the claims versus just claim 1 in *Zynga* and claims 1–4, 8, 10–12, and 26 in the Related Litigation.

Second, the trial in the *Zynga* case only superficially addressed Roy as to one claim during one hour of a four-day trial. Ex.1031 at 94:16–102:9; 107:9–108:25; 110:23–111:8. In contrast, Carvana’s Petition presents a robust explanation of why Roy’s dual-MVC system clearly anticipates and/or renders obvious every limitation of every independent claim, i.e., claims 1, 13, 25, and 26 and not just claim 1. *See* § II.D; Petition at 30–44.

Third, the *Zynga* jury’s conclusion on invalidity does not inform the analysis here, at least because the standard of review is different. The PTAB’s preponderance of the evidence standard versus the clear-and-convincing standard in *Zynga* means that the PTAB may properly reach a different conclusion on validity—even based on the same evidence—concerning the ’719 Patent. *Novartis AG v. Noven Pharms. Inc.*, 853 F.3d 1289, 1294 (Fed. Cir. 2017) (affirming PTAB obviousness finding on same patent and similar arguments/evidence that Article III court previously found not to render patent obvious under higher burden); *see also E-Trade Financial Corp. v. Droplets, Inc.*, IPR2015-00470, 2016 WL 3476939 (PTAB June 23, 2016) (PTAB rejecting expert assertion that PTAB should give deference to Article III court validity finding on same patent in different case).

Carvana’s *Sotera* stipulation also weighs “strongly in favor” of not exercising discretion. *Samsung Electronics Co., Ltd. v. Harbor Island Dynamic, LLC*, IPR2024-01402, Paper 9 at 9–10 (PTAB Apr. 4, 2025); *see also* Paper 14

(PTAB Apr. 22, 2025) (on Director Review, not disturbing institution decision, even in view of pending trial); *Nikon Corp. et al. v. Optimum Imaging Techs., LLC*, IPR2024-01374, Paper 19 at 22 (PTAB Apr. 29, 2025) (finding *Sotera* stipulation “significantly reduces the overlap between the district court litigation and this IPR”).

IBM’s argument that Carvana’s *Sotera* stipulation is ineffective because Carvana’s invalidity contentions purport to contain combinations of Roy and system prior art is flatly incorrect. DD Brief at 32. IBM does not identify which Carvana combination includes “system art,” likely because there is none. *Id.* (IBM citing various pages of Carvana’s invalidity contentions but never clarifying what system is at issue). The only “system” art Carvana provided in its invalidity contentions is a program called “Diablo,” which *does not* appear in Carvana’s Roy-based combinations. *Compare* Ex.2020 at 35 (citing “Diablo”) *with* Ex.2021 (Roy-based contentions not citing “Diablo”). And “even considering the presence of system art as a mitigating factor in favor of Patent Owner,” the PTAB still finds that a *Sotera* stipulation weighs in favor of institution. *Nikon* at 22.

Neither *Motorola Solutions, Inc. v. Stellar, LLC* nor *SAP Am., Inc. v. Cyandia, Inc.* disturb the heavy weight in favor of institution that Carvana’s *Sotera* stipulation provides here. DD Brief at 32 (citing same). For example, in *Motorola*, the Director found that because trial was set *eleven months* before the projected

FWD, the parties had exchanged expert reports, and the court had construed disputed claim terms, this counseled in favor of exercising discretion to deny institution. *Motorola Solutions, Inc. v. Stellar, LLC*, IPR2024-01205, Paper 19 at 3 (PTAB Mar. 28, 2025). Here, trial is not scheduled, the parties have not exchanged expert reports, and no *Markman* order has issued. Similarly, in *SAP*, the petitioner continued to challenge the relevant patent in the district court with system art embodying a reference at issue in the IPR, limiting the practical effect of its *Sotera* stipulation. *SAP Am., Inc. v. Cyandia, Inc.* IPR2024-01496, Paper 13 at 9 (PTAB Apr. 7, 2025). That is not the case in the Related Litigation.

Accordingly, factor 4 strongly favors institution.

5. *Fintiv* Factor 5: Because Trial Is Not Yet Scheduled in the Related Litigation, the Parties Being the Same in the Related Litigation Favors Institution

Under the fifth *Fintiv* factor, the PTAB considers whether the petitioner and the defendant ***in the parallel proceeding*** are the same party. *Nikon* at 23. The appropriate parallel proceeding to look to here is the Related Litigation. Even though IBM cites *Mylan* and *Fitbit* for its argument that the *Zynga* case—which Carvana was not a party to—suggests factor 5 weighs against institution, those cases are distinguishable because, as explained *supra* in § III.B.2, there is no unity of asserted claims in *Zynga* and the Petition. It is the Related Litigation that matters here.

Prior PTAB decisions have found that when the parties are the same, factor 5 generally follows factor 2, such that factor 5 favors institution when, as here, trial in the related litigation is set to occur *after* the projected FWD date. *Nikon* at 23–24; *Huawei Tech. Co. v. WSOU Inv., LLC*, IPR2021-00225, Paper 11 at 14 (PTAB June 14, 2021); *Google LLC v. Parus Holdings, Inc.*, IPR2020-00846, Paper 9 at 21 (PTAB Oct. 21, 2020) (“Here. . . Petitioner is the defendant in the parallel proceeding. This fact could weigh either in favor of, or against, exercising discretion to deny institution, depending on which tribunal was likely to address the challenged patent first.”); *Hanwha Solutions Corp. v. REC Solar Pte. Ltd.*, IPR2021-00989, Paper 12 at 14, 17 (PTAB Dec. 13, 2021) (determining that factor 5 did not weigh in favor of exercising discretion to deny institution where district court trial date was set for three months after statutory deadline for a final written decision); *Tesla, Inc. v. Autonomous Devices LLC*, IPR2023-01054, Paper 20 at 14–15 (PTAB Dec. 13, 2023) (when FWD projected deadline precedes trial date and the parties are the same, factor 5 weighs against exercising discretion).

As described in § III.B.2, trial in the Related Litigation is ***highly unlikely*** to occur before the projected FWD deadline. Accordingly, factor 5 favors institution.

6. *Fintiv* Factor 6: The Strong Merits of this Petition Favor Institution

Because the merits of the Petition are particularly strong, factor 6 weighs strongly in favor of institution.

Claims 1, 13, 25, and 26 (the independent claims) of the '719 Patent require that both a client and server perform model-view-controller functions. Ex.1001 at claims 1, 13, 25, and 26. The Petition plainly provides the explanation of why both Roy's client and server each have the **model**, **view-generating logic**, and **controller logic** (blue indicates client; green indicates server):

(1) **model** in client-side **slave copy database 68** and server-side **database 72**; (2) **view-generating logic** in client-side **rendering commands 69** and **display 70** and server-side **rendering commands 73** and **display 74**; and (3) **controller logic** in client-side generated **events 63** and **event server 65** and server-side generated **events 64** and **event server 67**. Ex.1003¶85; Ex.1004, Fig.6, 8:60–9:5.

Petition at 17. Acknowledging as much, IBM resorts to misleadingly quoting Roy to argue that instead of the server-to-client interaction that Roy describes, Roy somehow bypasses having a server at all, and discloses a “client-to-client”

system—it does not. DD Brief at 37 (annotated to show language inserted by IBM that does not appear in Roy):

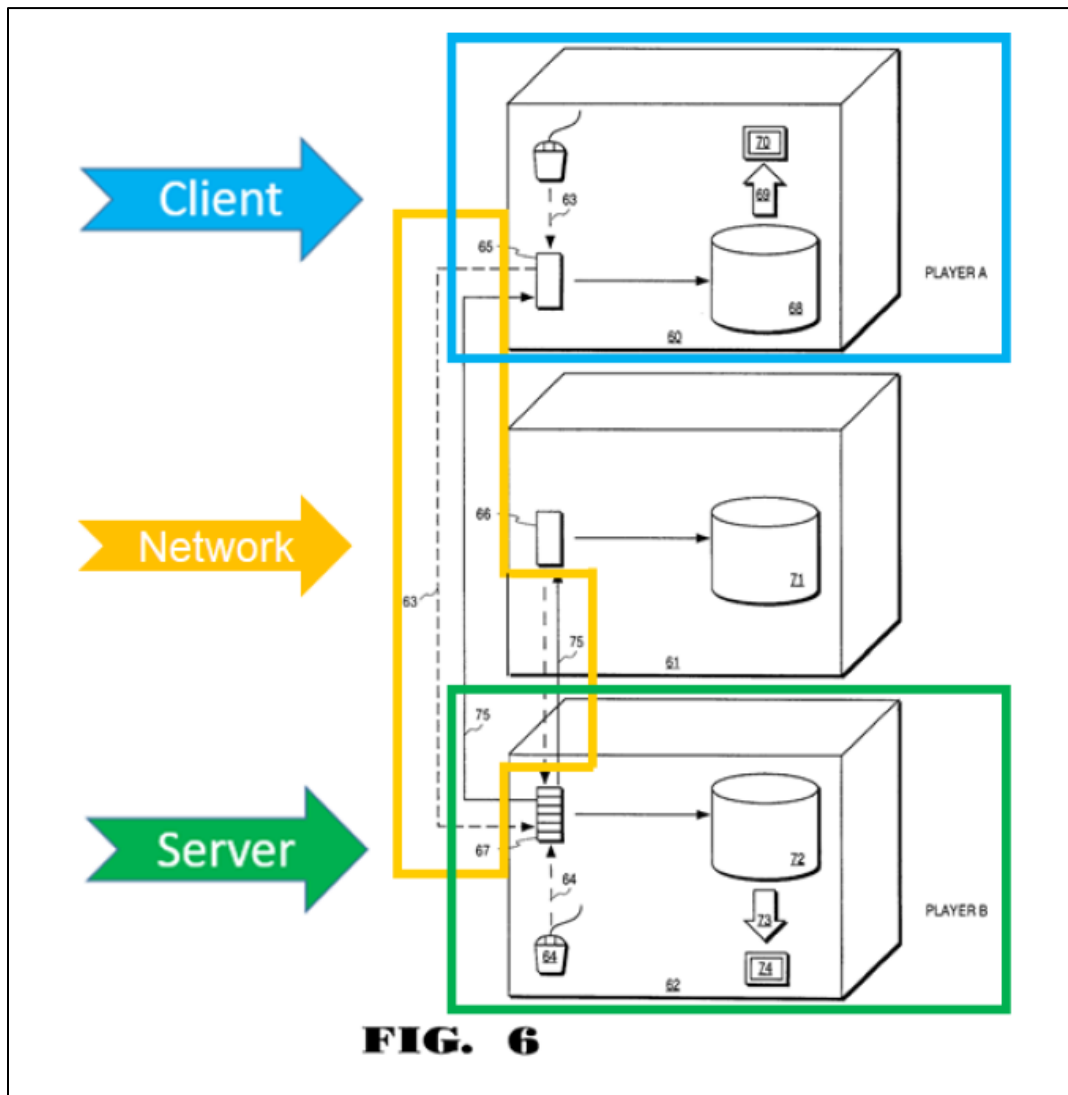
To the contrary, Roy teaches that different logic would be executed even between the individual “clients” (one of which is mapped to the claimed “server”), as different players have different interactions with the game world. (See, e.g., Ex. 1004 at 3:24-35 (“[T]he *player on offense* [i.e., *one client*] might be responsible for movement of the players, including the speed and direction of various players, while the player on defense [i.e., *another client*] might be responsible only for selecting a predefined defensive pattern.”), 3:35-47 (“[O]ne player acting as a ‘superhero’ [i.e., *one client*] may participate on a very active level, while various parameters of the game might be determined at a high level by one or a small number of players [i.e., *another client*] who participate only in a peripheral manner (e.g., by setting game conditions, selecting obstacles for the superhero to overcome, etc.).”).) Indeed, Roy

37

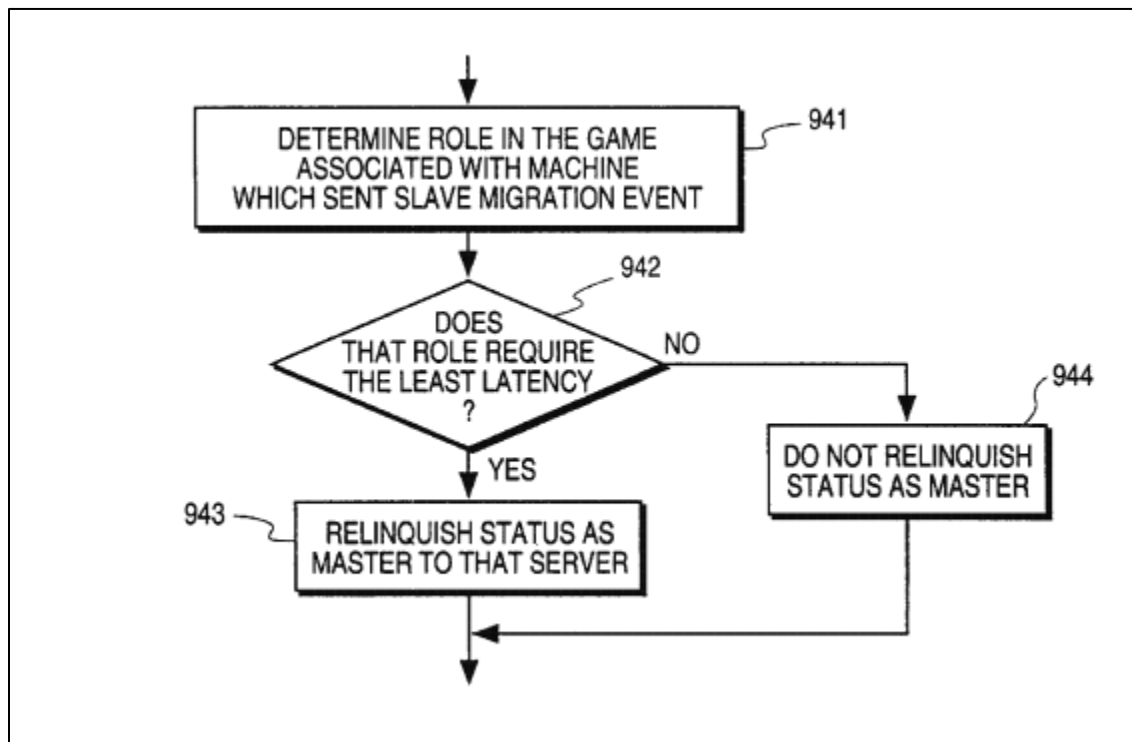
What Roy *actually* describes is an elegant system that enables the most active user to become “the server” of the system, and which computer that is changes depending on the status of the gameplay. As described in the Petition, and as annotated in Figure 6 below, computer 62 is the master server and its components are the “server” of the independent claims. Ex.1004 at 8:60–9:5 (“Referring to both FIG. 5B and FIG. 6, note that slave event server 65 on

computer 60 was initially connected to event server 66 on computer 61 (FIG. 5B).

Event server 66 was initially the master event server. **However, once event server 67 in computer 62 becomes the master event server**, it becomes more efficient for slave event server 65 to connect directly to event server 67 (FIG. 6).”) (emphasis added).



Petition at 32. The process flows of FIG. 9C likewise make clear that *any* computer in the system can be a server. Petition at 16. For example, if the user of system is particularly active, that player's machine will request to become the "server" of the system. If the algorithm determines that, yes, indeed, that player is the most active ("require[s] the least latency"), the system will relinquish its status as master to **that server:**



Ex.1004 at Fig. 9C; 8:41–51.

IBM's other argument that the logic executed on the server and client would be different is likewise disingenuous. DD Brief at 37. Each computer on the system—whether acting as server or client—is loaded with the same "stored game software." See Ex.1004 at 3:51-54 ("The server computer system 1 and each of the

client computer systems 2 includes **stored game software, including software in which the present invention is embodied.**”) (emphasis added); Petition at 15.

Further, the trial in *Zynga* could only superficially address how Roy invalidates the ’719 Patent claim 1 given the limited time Dr. Bennett was on the stand, as described above. § II.D. Accordingly, the Petition makes out a strong case of invalidity of the independent claims.

Although that itself is sufficient for institution, the Petition also makes out a strong case of invalidity of the dependent claims. § II.D. As explained above, neither Fennell nor O’Reilly were presented in *Zynga*, and are not advanced in the invalidity contentions in the Related Litigation. Fennell and/or O’Reilly render every dependent claim obvious. As just one example, claims 3 and 15, which depend from claims 1 and 13, respectively, merely require that the method/system of those claims be performed “in accordance with browser software running thereon.” Ex.1001 at claims 3 and 15. Fennell plainly discloses an application that is deployed over a browser. Ex.1005, 3:11–15 (describing the system run on a “World Wide Web browser with software ‘applets’”).

In the same way, O’Reilly discloses all of the dependent claims’ implementations in JavaScript. For example, claims 7 and 9 require the use of “not a visible frame,” in other words, in *invisible* frame. Ex.1001 at claims 7 and 9. O’Reilly not only discloses the use of invisible frames, it even teaches precisely

how to code them. Ex.1006 at 208–209 (“But what if your design calls for all the frames to be dynamic? A static frame is still required, but the trick here is to create the static frame so that it is invisible! You do this by explicitly creating it at a location that is greater than 100% of the frame width or height. HTML to create such an invisible frame is shown in Example 12-5.”).

Accordingly, the strong merits of the petition strongly favor institution under factor 6.

C. Summary of *Fintiv* Factors

Factor 1	Favors institution
Factor 2	Favors institution
Factor 3	Strongly favors institution
Factor 4	Strongly favors institution
Factor 5	Favors institution
Factor 6	Strongly favors institution

Balancing the factors holistically, institution is very much warranted.

D. Additional Considerations Support Institution

The March 26, 2025 Memo identified additional factors the Director may consider, including: (1) whether the PTAB or another forum has already adjudicated the validity or patentability of the challenged claims; (2) the strength of the unpatentability challenge; (3) the extent of the petition’s reliance on expert

testimony; and (4) the settled expectations of the parties, such as the length of time the claims have been in force. These factors, too, favor institution.

1. No Other Forum Has Considered All the Challenged Claims and the Prior Art Presented

The Petition challenges all claims of the '719 Patent, which no other forum has heard. In *Zynga*, only claim 1 was at issue. In the Related Litigation, claims 1–4, 8, 10–12, and 26 are asserted. § II.D. Though IBM claims that the *Zynga* case considered the Petition's challenges, the jury in *Zynga*—applying a different, higher, clear-and-convincing standard—only heard a superficial treatment of Roy's disclosures and never heard a challenge based on Fennell or O'Reilly. Given Carvana's *Sotera* stipulation, *no other forum will do so*. This factor thus favors institution.

2. The Strength of Carvana's Unpatentability Challenge Favors Institution

As discussed above for *Fintiv* factor 6, the Petition's strong merits compel institution. Despite IBM's suggestion to the contrary, Roy does not disclose a client-to-client system—any computer in the system can be the “server,” depending on user requirements. Further, the strength of Carvana's challenge to the dependent claims of the '719 Patent as discussed above further weighs in favor of institution. The PTAB has never had the opportunity to consider the strong case of unpatentability presented in this Petition, favoring institution.

3. Because the Petition's Grounds are Plainly Explained by the Prior Art and Dr. Bennett, this Factor Favors Institution

Dr. Bennett's impressive background and knowledge about dual-MVC systems will be a benefit to the PTAB's analysis of the merits of the Petition. Ex.1003 at ¶¶3–11. But Roy, Fennell, and O'Reilly themselves explain how each limitation of the independent and dependent claims of the '719 Patent is unpatentable. § II.D; § III.B.6. IBM argues that Carvana attempts to “backfill” Roy through Dr. Bennett's declaration. DD Brief at 41. It further argues that Roy does not disclose that the “view-generating logic” would be the same for every computer in the system. DD Brief at 41. And Roy does, at least, because every computer in the system includes the same “stored game software.” *See* Ex.1004 at 3:51:54 (“The server computer system 1 and each of the client computer systems 2 includes **stored game software, including software in which the present invention is embodied.**”) (emphasis added); Petition at 15.

Accordingly, because the prior art plainly describes each limitation of the '719 Patent and because Dr. Bennett's further analysis will assist the PTAB, this factor favors institution.

4. Due To IBM's Eleven-Year Delay in Asserting the '719 Patent, the PTAB Should Protect Carvana's Settled Expectations By Instituting This IPR

Carvana has been operating its now-accused website since 2013. *See* Ex.1038 at 8 (Exhibit 4 to Carvana's Motion to Stay Pending *Inter Partes* Review). Despite very public notice of the same, IBM sat on its rights and waited until April 3, 2024—eleven years—to finally assert the '719 Patent in the Related Litigation. The PTAB should thus protect Carvana's settled expectation of being able to operate its website free of the '719 Patent, and not reward IBM's long delay.

Moreover, IBM's only argument under this factor is that the '719 Patent's expiration favors discretionary denial. DD Brief at 42. This belies the settled law that the PTAB's jurisdiction squarely covers expired patents. *Inari Agriculture, Inc. v. Corteva Agriscience LLC*, IPR2024-01014, Paper 15 at 24 (PTAB Dec. 16, 2024) ("The statutes and our Rules governing *inter partes* review do not exclude expired patents"); Paper 22 (PTAB Mar. 6, 2025 (denying request for Director Review); *Amazon.com, Inc. v. Nokia Technologies Oy*, IPR2024-01139, Paper 11 at 11 (PTAB Feb. 12, 2025) ("We disagree . . . that the challenged patent's expiration favors discretionary denial here.").

Accordingly, this factor favors institution.

IV. CONCLUSION

For at least the foregoing reasons, Carvana respectfully requests the Director exercise discretion to institute this proceeding under 35 U.S.C. § 314(a).

Date: June 6, 2025

Respectfully submitted,

BALLARD SPAHR LLP

By: /Charley F. Brown/
Charley F. Brown
Reg. No. 52,658
browncf@ballardspahr.com

BALLARD SPAHR LLP
Customer Number 23859
(678) 420-9300 Phone
(678) 420-9301 Fax

Ballard Spahr LLP
999 Peachtree Street, NE, Suite 1600
Atlanta, GA 30309

CERTIFICATE OF COMPLIANCE

The undersigned certifies that the foregoing PETITIONER'S OPPOSITION TO PATENT OWNER'S DISCRETIONARY DENIAL BRIEF, exclusive of the parts exempted as provided in 37 C.F.R. § 42.24(a), contains 10,927 words as counted by the word-processing system used to prepare this document in compliance with 37 C.F.R. § 42.24(a).

Date: June 6, 2025

By: /Charley F. Brown/

Charley F. Brown (Reg. No. 52,658)
browncf@ballardspahr.com
Postal and Hand-Delivery Address:
Ballard Spahr LLP
999 Peachtree Street, NE, Suite 1600
Atlanta, GA 30309

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.C. § 42.6(e), the undersigned certifies that a complete copy of the foregoing PETITIONER'S OPPOSITION TO PATENT OWNER'S DISCRETIONARY DENIAL BRIEF and corresponding exhibits was caused to be served on counsel of record for Patent Owner by filing this document through PTACTS and by sending this document via electronic mail to the following addresses:

Taeg Sang Cho (Reg. No. 69,618)
tcho@desmaraisllp.com
Desmarais LLP
230 Park Avenue
New York, NY 10169
212-351-3400 (telephone)
212-351-3401 (facsimile)

IBMCarvanaService@desmaraisllp.com

Jordan N. Malz (Reg. No. 48,302)
William N. Yau (to be admitted *pro hac vice*)
Michael Hilyard (to be admitted *pro hac vice*)
jmalz@desmaraisllp.com
wyau@desmaraisllp.com
mhilyard@desmaraisllp.com

DESMARAIS LLP
230 Park Avenue
New York, NY 10169
212-351-3400 (telephone)
212-351-3401 (facsimile)

Date: June 6, 2025

By: /Charley F. Brown/
Charley F. Brown (Reg. No. 52,658)
browncf@ballardspahr.com
Postal and Hand-Delivery Address:
Ballard Spahr LLP
999 Peachtree Street, NE, Suite 1600
Atlanta, GA 30309