UNITED STATES DISTRICT COURT WESTERN DISTRICT OF TEXAS WACO DIVISION

PARKERVISION, INC.

Plaintiff,

VS.

INTEL CORPORATION

Defendant.

C.A. No. 6:20-cv-108-ADA

JURY TRIAL DEMANDED

PUBLIC VERSION

DEFENDANT INTEL CORPORATION'S SEALED REPLY IN SUPPORT OF ITS MOTION TO EXCLUDE OPINIONS AND TESTIMONY FROM PLAINTIFF'S TECHNICAL EXPERT DR. MICHAEL STEER

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Intel's Motion established that Dr. Steer's C/RTP opinions for certain asserted claims should be excluded both as untimely and as unreliable, and that his infringement opinions based on circuit-level simulations of Intel's products should be excluded under *Daubert* and FRE 702. Dkt. 175 ("Mot."). ParkerVision's Response, Dkt. 209 ("Resp."), confirms that Intel's Motion should be allowed.

A. ParkerVision Cannot Excuse Its Failure To Disclose Its C/RTP Theory And Evidence During Fact Discovery.

ParkerVision's brief is most notable for what it does *not* say. ParkerVision does not dispute, among other things, that:

- Dr. Steer relies on more than 1,000 documents to support his C/RTP opinions that
 ParkerVision never identified as allegedly relevant to C/RTP during fact discovery,
 Mot. at 5-6;
- ParkerVision provided no narrative explanation during fact discovery to support an August 21, 1997 invention date, much less explain Dr. Steer's new theory that a circuit board schematic allegedly from August 1997—which ParkerVision failed to identify as relevant to C/RTP during fact discovery—supported that date, *id.* at 2-4, 8;
- ParkerVision's 30(b)(6) witness on C/RTP, Jeffrey Parker, was unable to explain, or identify any document to support, an alleged August 1997 invention date, *id.* at 4; and
- Intel is prejudiced by the timing of ParkerVision's disclosure (and ParkerVision makes no attempt to justify its delay), *id.* at 8.

These undisputed facts confirm that Dr. Steer's C/RTP theory and evidence for asserted claim 5 of the '902 patent, claim 6 of the '725 patent, and claims 5 and 17 of the '673 patent were not properly disclosed during fact discovery, and should therefore be excluded under Rule 37. See Ravgen, Inc. v. Lab. Corp. of Am. Holdings, No. 6:20-cv-969-ADA, slip op. 4 (W.D. Tex. Oct. 4, 2022) ("Ravgen"); Mot. at 6-7, 8.

None of ParkerVision arguments warrant a different result. First, ParkerVision tries

repeatedly to pass the blame, arguing that *Intel* should have pressed ParkerVision to disclose the C/RTP theory and evidence on which Dr. Steer now relies. Resp. at 1, 5, 6. ParkerVision has it backwards. It was *ParkerVision's* burden to respond completely to Intel's Interrogatory No. 2, to put forward a 30(b)(6) witness who could answer basic questions about ParkerVision's theory, and to adduce evidence supporting an early priority date. *See* Fed. R. Civ. P. 26(e)(1)(A), 33(b)(1); *PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1305–06 (Fed. Cir. 2008). ParkerVision did none of those things, instead choosing to wait until its expert's rebuttal report to disclose its new C/RTP theory and evidence. *See* Mot. at 2-9. ParkerVision did so at its own peril. *E.g., Ravgen*, slip op. 4 ("exclusion" is the "*presumptive*" sanction where "party fails to disclose relevant information during fact discovery"). ¹ ParkerVision fails to cite *any* authority for its argument that *Intel* was required to beg ParkerVision to meet its basic discovery obligations. *See* Resp. at 1, 5, 6.²

Second, ParkerVision argues that its untimely disclosure is "not the proper subject of a Daubert motion." Resp. at 1, 3. But Intel moved to preclude Dr. Steer from relying on this untimely theory/evidence under **Rule 37**, Mot. at 6-9, and such a motion is properly (and routinely) granted pre-trial. *E.g.*, *Ravgen*, slip op. 4 (granting pretrial motion to exclude untimely disclosed theory and evidence); Mot. at 6-7 (collecting cases).³

¹ Emphases are added, unless otherwise noted.

² Intel's allocation of its deposition questioning across many issues (Resp. at 6) is irrelevant to whether Dr. Steer's C/RTP theory and evidence were disclosed during fact discovery as the Federal Rules require. They were not, which is the basis for Intel's Motion.

³ ParkerVision addresses only *one* of the cases Intel cited, but ParkerVision cannot meaningfully distinguish even that case, *Elbit Systems Land & C4I Ltd. v. Hughes Network Systems, LLC*, 2017 WL 2651618 (E.D. Tex. June 20, 2017). *See* Resp. at 3. In *Elbit*, the court excluded as untimely a patentee's priority date theory disclosed at the close of fact discovery, where the patentee had long "possessed the underlying facts." 2017 WL 2651618, at *10-11. So too here—ParkerVision has long "possessed the underlying facts" for its C/RTP theory, but *never* disclosed them as relevant to C/RTP until after the close of fact discovery. *See id.* Indeed, *Elbit* also excluded additional evidence offered for the first time in an expert's rebuttal report because it was not disclosed in an interrogatory response; precisely the relief Intel seeks here. *Id.* at *10-12.

Third, ParkerVision makes much of the fact that it identified August 21, 1997 as the alleged priority date during discovery. Resp. at 1, 3. This misses the point. Merely identifying an August 1997 date did not comply with ParkerVision's obligation to identify—in response to Intel's discovery requests and deposition questioning—the evidence and theory ParkerVision now alleges supports that date (which ParkerVision did not do). ParkerVision relies solely on its preliminary infringement contentions and associated document production—in particular, PV_011928 (Dkt. 209-4)⁴—to claim that Intel was "on notice" of ParkerVision's alleged early invention. See Resp. at 3-4. But missing from ParkerVision's disclosures during fact discovery—and even from its brief on this Motion—is any explanation of how these documents could support an August 1997 invention date. See id. As Intel has explained, they do not. See Mot. at 2-3, 4-5. Indeed, PV_011928 is an evaluation report from April 1998; eight months after ParkerVision's claimed August 1997 invention date. See Dkt. 209-4.⁵

Fourth, ParkerVision points out that Intel "tested" ParkerVision's C/RTP theory during fact discovery, citing testimony from ParkerVision's 30(b)(6) designee Mr. Parker. Resp. at 5-6. That "test[ing]," however, revealed that ParkerVision had no support for its August 1997 invention date, as the cited testimony itself demonstrates. *Id.* Mr. Parker could narrow the period when ParkerVision allegedly came up with the claimed ideas only to "somewhere in th[e] time frame" "between 1995 and 1999"—i.e., a period spanning two years before August 1997 to two years after it. *Id.* at 5 (quoting Dkt. 209-6 at 35:20-25). And, when asked for the

⁴ ParkerVision's brief misidentifies this document as PV 011982.

⁵ ParkerVision also suggests that Intel "misunderstand[s]" what is shown in the alleged August 1997 circuit board schematic (CONF-PV00175452-453) on which Dr. Steer's August 1997 C/RTP opinion depends. *See* Resp. at 4. There was no misunderstanding. According to ParkerVision, the schematic "illustrates the configurable components" of ParkerVision's Eddie-1 circuit board, while PV_011928 shows "one configuration of the configurable components." Resp. at 4-5. The relevant point, however, is that it is now undisputed that this alleged August 1997 schematic was *never disclosed* as relevant to C/RTP during fact discovery. Mot. at 5-6.

basis for ParkerVision's August 21, 1997 date specifically, Mr. Parker could say only that "my understanding is that there's documentation that we've provided" to support that date, without identifying that supposed "documentation" (which, as explained above, does not exist). Resp. at 5-6 (citing Dkt. 209-7 at 599:18-23). Mr. Parker's testimony thus only confirms that ParkerVision had no support for an August 1997 invention date, and that it should not be permitted to rely on a new and previously undisclosed theory now. *See* Mot. at 4; *Function Media, L.L.C. v. Google, Inc.*, 2010 WL 276093, at *1 (E.D. Tex. Jan. 15, 2010) (30(b)(6) testimony binding on party).

B. Dr. Steer's C/RTP Opinions Also Should Be Excluded Under *Daubert* And FRE 702.

In addition to being untimely disclosed, Dr. Steer's C/RTP opinions should be excluded as unreliable under *Daubert* and FRE 702. On this issue too, ParkerVision's brief is notable for what it does *not* say. ParkerVision does not dispute, among other things, that:

- ParkerVision's expert never cites the Court's "storage element" claim construction in his C/RTP analysis, Mot. at 11-12;
- ParkerVision's expert never even asserts that any capacitor in ParkerVision's alleged circuit board stored "non-negligible amounts of energy," as required by the Court's "storage element" claim construction, id.;
- ParkerVision's expert's methodology in analyzing the "storage element" limitation for purposes of C/RTP is inconsistent with his own infringement and validity analysis. *Id.* at 13-14. ParkerVision points to nothing in Dr. Steer's C/RTP analysis that is even remotely analogous to the simulations Dr. Steer performed when attempting to show that the Intel products *do* store "non-negligible amounts of energy," or to the "telecommunication standards" criterion that he applied when attempting to show that Intel's prior art do *not* store "non-negligible amounts of energy." *Id.* at 14.

Moreover, each argument that ParkerVision's brief *does* raise ignores the case law and arguments presented in Intel's Motion, and is either legally or factually wrong.

First, ParkerVision wrongly attacks Intel for allegedly choosing "to advance its lack of evidence arguments under the guise of a *Daubert* motion." Resp. at 6. To the contrary, Intel provided clear case law support—which ParkerVision does not even mention, much less distinguish—showing that expert testimony such as Dr. Steer's that does not apply the Court's claim construction is irrelevant, not helpful to the factfinder, and properly excluded under FRE 702. See OneSubsea IP UK Ltd. v. FMC Techs., Inc., 2020 WL 7263266, at *5-7 (S.D. Tex. 2020) (excluding expert's infringement opinion because expert did not "properly consider" an agreed claim construction and "misinterpret[ed]" other claim constructions); Mission Pharmacal Co. v. Virtus Pharm., LLC, 2014 WL 12480016, at *4 (W.D. Tex. Sept. 12, 2014) (excluding expert testimony that was inconsistent with the court's construction). The rationale for this rule is straightforward: experts would otherwise be permitted to disregard the court's construction and apply their own selective interpretation of the claims. See id. ParkerVision's failure even to mention this caselaw speaks volumes.

Second, ParkerVision asserts that Dr. Steer "applied the Court's claim construction for the 'storage element' terms" (Resp. at 8), but ParkerVision can point to nothing to substantiate that assertion. For example, ParkerVision cites Dr. Steer's general statement that he had "reviewed the constructions of the U.S. District Court for the Western District of Texas" and had "relied on these constructions in forming [his] opinions in this case." *Id.* But that general statement does not come close to showing that he actually applied the Court's "storage

⁶ The one case that ParkerVision does cite (Resp. at 6 n.2)—*PerdiemCo, LLC v. IndusTrack LLC*, 2016 WL 8189020 (E.D. Tex. Nov. 3, 2016)—did not involve an expert's failure to apply the court's binding claim construction. Rather, *PerdiemCo* involved only the issue of whether a conception date was properly corroborated, and held that the patentee's "evidence as to the date of conception, and [its expert's] testimony to the same effect, are not so unreliable as to preclude its presentation to the jury." *Id.* at *2.

element" construction when analyzing C/RTP, particularly where his analysis never makes even the assertion—much less the required showing with corroboration—that any capacitor in the alleged ParkerVision circuit board stored the "non-negligible amounts of energy" required by the Court.

ParkerVision next points to Dr. Steer's calculation that allegedly showed a percentage of energy discharged from a capacitor. Resp. at 8-9. But as Intel explained in its Motion (Mot. at 13 n.8), that calculation does not show that Dr. Steer applied the Court's claim construction. That calculation shows, at most, what *percentage* of the energy stored on the capacitor is discharged; it shows nothing about whether the *amount* of energy stored on the capacitor is "non-negligible," as required by the Court. ParkerVision's brief never responds to Intel's Motion on this issue.

ParkerVision next cites a background technology discussion from Dr. Steer's opening report stating that "a capacitor is one type of circuit element used to store (accumulate) energy." Resp. at 9 (citing Dkt. 209-10, Steer Op. Rpt., ¶90). But as Intel already explained in its Motion, no one disputes that capacitors store energy; the issue is whether the capacitor on the ParkerVision circuit board stored "*non-negligible* amounts of energy" as the Court's construction requires. Mot at 12-13. Dr. Steer's report was silent on that issue.

ParkerVision also cites Dr. Steer's statement that ParkerVision's circuit board capacitor functioned "as part of an *energy transfer system*, which transfers non-negligible amounts of

⁷ ParkerVision also argues that Dr. Steer made various assertions—across multiple different claim charts—that ParkerVision says are "consistent with" a capacitor that stores "nonnegligible amounts of energy." Resp. at 9-10. But tellingly, ParkerVision does not cite any specific pages or quote any specific language from these claim charts. Moreover, assertions that are merely "consistent with" the required "storage element" are insufficient to actually *demonstrate* the required "storage element." For example, ParkerVision's general characterizations of Dr. Steer's claim charts suggest only a capacitor that stores and discharges energy—they do not speak to crucial point of whether the capacitor stores "nonnegligible amounts of energy" as required by the Court's claim construction, which Dr. Steer never applied.

energy <u>from</u> an input electromagnetic signal <u>to</u> a low impedance load." Resp. at 9 (citing Dkt. 209-11-Dkt. 209-16 (Dr. Steer's C/RTP charts)). But again, as Intel explained in its Motion (Mot. at 13), the assertion that the ParkerVision system as a whole transferred non-negligible energy to a load is not an assertion that the capacitor stored "non-negligible amounts of energy"—since ParkerVision has always maintained that the energy transferred to the load in the ParkerVision alleged invention is a combination of both (1) energy discharged from the capacitor, and (2) energy transferred directly from the input signal. Dkt. 209-10, Steer Op. Rpt., ¶468 ("The current is made up of energy ... from the EM signal and discharged energy ... from the 'storage' capacitor."). Yet again, ParkerVision has no response to Intel's Motion on this point.

Finally, ParkerVision argues that Dr. Steer's C/RTP opinions should not be excluded because ParkerVision has met its burden of proving by "a preponderance of the evidence that the testimony is reliable." Resp. at 10. ParkerVision is wrong again. Dr. Steer's opinions regarding C/RTP cannot be reliable at any level of proof because he fundamentally failed to apply the Court's claim construction in any manner. Such opinions, offered with no regard for the Court's claim construction, are not helpful to the jury, would only confuse the issues, and should be excluded. See OneSubsea, 2020 WL 7263266, at *5-7 ("Expert opinions that are inconsistent with the established constructions of claim terms are irrelevant and unhelpful to the factfinder."); Mission Pharmacal, 2014 WL 12480016, at *4 (excluding expert testimony that was inconsistent with the court's construction "because it is irrelevant, could confuse the jury, and would not 'help the trier of fact ... to determine a fact in issue'"). 8

physical embodiment. See Mot. at 10-11. ParkerVision cites vague statements by Dr. Steer about ParkerVision (1) "creating prototypes and conducting tests," (2) and (3) issuing a press release discussing

⁸ ParkerVision also stumbles when attempting to defend Dr. Steer's failure to present any evidence that the August 21, 1997 circuit board schematic was *actually implemented* in an

testing of an Eddie-1 chip. Resp. at 7. But even assuming Dr. Steer's statements show a 1997 implementation of the *Eddie-1 chip*, that chip did not contain the alleged "storage element,"

C. Dr. Steer's Infringement Opinions Based On His Circuit-Level Simulations Should Be Excluded Under *Daubert* And FRE 702.

Intel's Motion explained that Dr. Steer's circuit-level simulations did not "reliably appl[y]" standard circuit-simulation methodology (FRE 702) and made his infringement analysis fundamentally unreliable. Mot. at 15-19. Specifically, Dr. Steer's circuit-level simulations simulated the transistors in the Intel products as idealized switches—i.e., switches that do not exist in the Intel products. Dr. Steer did so even though he had available to him—and had used in other, separate simulations—a real-world transistor model that yielded different results unfavorable to ParkerVision.

ParkerVision's only response on this issue misses the point entirely. ParkerVision spends five pages (Resp. at 11-15) seeking to establish something that Intel is not even disputing: that Intel's transistors act as switches under the Court's claim construction (i.e., "electronic device[s] for opening and closing a circuit as dictated by an independent control input"). ParkerVision's argument misses the point because, even if the Intel transistors act as switches,

. As Dr.

Subramanian explained—and as ParkerVision does not dispute in its brief—"[t]here are several significant and substantive differences between products that operate with an ideal switch compared to those that operate with a transistor." Dkt. 175-23, Sub. Reb. Rpt., ¶702.

which was a capacitor on the circuit board that contained the Eddie-1 chip. See Dkt. 209-11, Steer '902 patent claim chart at 10 (identifying "energy storage module" as capacitor C8), 6 ("The circuit board includes capacitors and resistors having the following component values ... C8 = 220 pF"); cf. id. at 5 (showing circuit board containing both Eddie-1 chip and separate capacitor C8). Thus, none of the statements ParkerVision cites is evidence on the crucial point—whether the August 21, 1997 circuit board schematic on which Dr. Steer relies for an early invention date (including its specific circuit board components) was actually implemented, either in August 1997 or at any time. Nothing in Dr. Steer's report speaks to that issue.

Transistor electrical effects such as "parasitic coupling capacitance" and "charge injection" are simply not captured by an ideal switch. *Id.*

Moreover, Dr. Steer's simulations using an ideal switch are not merely "shaky but admissible evidence," as ParkerVision brief suggests, but rather indicate a fundamentally unsound and unreliable methodology. Resp. at 15 (citing Cloud of Change, LLC v. NCR Corp., No. 6:19-cv-513-ADA, Dkt. 205 at 6 (W.D. Tex. Nov. 9, 2021)). Two factors demonstrate this unreliability. First, it is undisputed that Dr. Steer could have modeled the Intel transistors in his circuit-level simulations using the same real-world transistor model that he used elsewhere in his report. Dr. Subramanian modified Dr. Steer's simulations to incorporate that real-world transistor model, and ParkerVision does not even suggest that Dr. Steer could not have done so. Second, Dr. Steer's use of an ideal switch—rather than a real-world transistor—was not a harmless simplification but had a major effect on the simulation results. *Id.* at 18-19.

ParkerVision's brief never disputes that these different results arise from using a realworld transistor model. Moreover, and tellingly, ParkerVision's brief never offers any explanation for why Dr. Steer chose to use an ideal switch in his circuit-level simulations when he had a real-world transistor model at his fingertips. Whether his choice to use an ideal switch was affected by the less favorable results that a real-world transistor model yields is an open question. But there should be no question that where, as here, an expert has used a methodology for which there is no logical explanation and which has an undisputedly major

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effect on the infringement analysis, such a methodology is not reliable evidence that the plaintiff should be allowed to use to confuse the jury. The Court should exclude Dr. Steer's opinions related to alleged infringement based on his unreliable circuit-level simulations of the Intel products.

D. Conclusion.

For the foregoing reasons, Intel's Motion should be granted.

Dated: November 22, 2022

Respectfully submitted,

/s/ J. Stephen Ravel

Vice) Sarah B. Petty (admitted *Pro Hac Vice*) Harry Hanson (admitted *Pro Hac Vice*) Samuel C. Leifer (admitted *Pro Hac Vice*) Alicia Coneys (admitted *Pro Hac Vice*) WILMER CUTLER PICKERING HALE AND DORR LLP 60 State Street Boston, Massachusetts 02109

Michael J. Summersgill (admitted *Pro Hac*

T (617) 526-6000 michael.summersgill@wilmerhale.com sarah.petty@wilmerhale.com harry.hanson@wilmerhale.com samuel.leifer@wilmerhale.com alicia.coneys@wilmerhale.com

Todd Zubler (admitted *Pro Hac Vice*) Isley M. Gostin (admitted *Pro Hac Vice*) WILMER CUTLER PICKERING HALE AND DORR LLP 1875 Pennsylvania Avenue NW Washington, DC 20006 T (202) 663-6636 todd.zubler@wilmerhale.com isley.gostin@wilmerhale.com

Mary (Mindy) V. Sooter (admitted Pro Hac Vice) WILMER CUTLER PICKERING HALE AND DORR LLP 1225 17th Street, Suite 2600

J. Stephen Ravel KELLY HART & HALLMAN LLP 303 Colorado, Suite 2000 Austin, Texas 78701 T (512) 495-6429 steve.ravel@kellyhart.com

James E. Wren Texas State Bar No. 22018200 1 Bear Place, Unit 97288 Waco, Texas 76798 T (254) 710-7670 james.wren@baylor.edu

Attorneys for Defendant Intel Corporation

Denver, CO 80202 T (720) 274-3135 mindy.sooter@wilmerhale.com

Jason F. Choy (admitted *Pro Hac Vice*) WILMER CUTLER PICKERING HALE AND DORR LLP 350 South Grand Avenue, Suite 2400 Los Angeles, California 90071 T (213) 443-5300 jason.choy@wilmerhale.com

CERTIFICATE OF SERVICE

I hereby certify that all counsel of record are being served with a copy of the foregoing sealed documents via electronic mail on November 22, 2022.

/s/ J. Stephen Ravel
J. Stephen Ravel