

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TEXAS INSTRUMENTS INCORPORATED,
Petitioner

v.

PARKERVISION, INC.,
Patent Owner

Case IPR2024-00934
Patent 7,496,342 B2

PETITIONER'S MOTION TO EXCLUDE

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	ARGUMENTS	2
	A. Ricketts’s Conclusions About DeMaw Rely on Deliberately Excluded and Insufficient Amounts of Data	2
	B. Ricketts’s Conclusions Are Based on Flawed Methodologies	6
	C. The Data in Appendix B Is Prejudicial, Confusing, and Has No Probative Value.....	9
III.	CONCLUSION.....	10

I. INTRODUCTION

Pursuant to 37 C.F.R. §42.64 and the Federal Rules of Evidence, Petitioner moves to exclude paragraphs 318, 329, 342, 352, 418, 419, 421, and 424 of Exhibit 2021. TI filed a Petition for *inter partes* review of claims 18-21, *inter alia*, with simulations of the DeMaw and Macnally circuits that showed performance of these claims. Prior to filing their POR, PO was provided additional simulation results, as well as underlying data in support of these simulations and the original simulations. With its POR, PO submitted an expert declaration by Ricketts (Exhibit 2021) that includes data to support his conclusions about the DeMaw circuit operation. Exhibit 2021, however, only presents a small subset of data (i.e., 2 microseconds of simulation data), and Ricketts bases his conclusions on this small subset. More, Ricketts admits to having deliberately excluded large portions of data from his analysis—data that are relevant to the question of whether DeMaw’s circuit performs the claimed methods. Thus, the portions of Exhibit 2021 (such as Paragraphs 318, 329, 342, 352, 418, 419, 421, 424, and Appendix B) that rely on such intentionally incomplete and insufficient data should be excluded under FRE 702, which requires that expert testimony be “based on sufficient facts or data,” that the testimony be “the product of reliable principles and methods,” and that the “expert’s opinion [reflect] a reliable application of the principles and methods to the facts of the case.” Additionally, Paragraphs 318, 329, 342, 352,

418, 419, 421, 424, and Appendix B are inadmissible under FRE 403 because they are data collected for a statistically insignificant amount of time, lack probative value, and are confusing and prejudicial.

II. ARGUMENTS

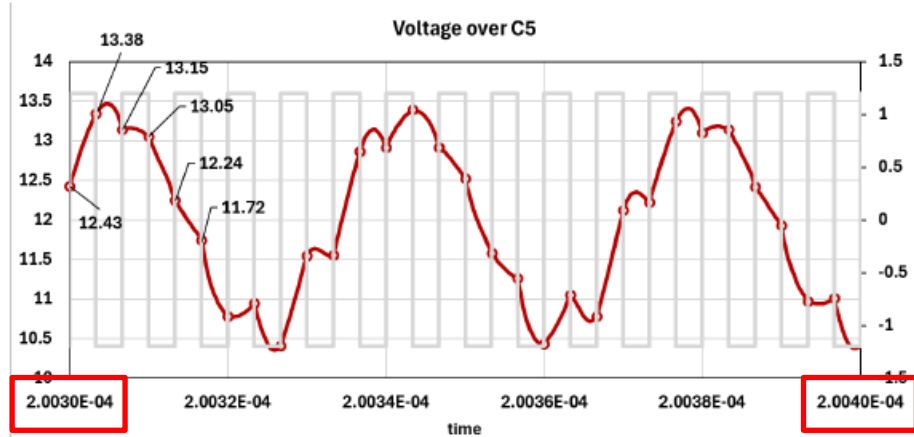
A. Ricketts's Conclusions About DeMaw Rely on Deliberately Excluded and Insufficient Amounts of Data

Ricketts's Declaration (Exhibit 2021) points to the data in Appendix B to support his conclusions that the DeMaw circuit does not perform the methods of claim 18-21. EX2021, ¶¶ 318, 329, 342, 352, 418, 419, 421, 424, App'x B. Appendix B, however, only shows data for 2 microseconds, just 2 cycles of circuit operation. *E.g.*, TI-1051, 55:5-21 (Ricketts confirming that the time range for the data in Appendix B is 2 microseconds or 2 cycles). Likewise, Paragraph 418, Figure 1 shows circuit operation for 1 microsecond (1 cycle), and Paragraph 419, Figure 2 shows circuit operation for 2 microseconds (2 cycles). TI-1051, 52:9-20, 55:22-56:3. In his deposition, Ricketts admits that he deliberately excluded the first 10 microseconds of data from each table in Appendix B. TI-1051, 57:1-18. Likewise, Ricketts admits that the Appendix B data only represents a small subset of simulation time, and that he had run the simulation for much longer. TI-1051, 54:5-17, 57:1-7 (explaining that he "picked a period"), 61:8-20. Ricketts was unable to specify how long he ran the simulation.

The amount of data produced by only 2 cycles of operation is not sufficient to accurately represent whether DeMaw's circuit has any instances of a discharge percentage within the claimed ranges. To illustrate that, compare Ricketts's data with Dr. Galton's data, which was collected over 50,999 cycles and that shows instances of the claimed discharge percentages. *E.g.*, TI-1003, ¶114; *see also* TI-1060, ¶132 (Dr. Galton stating that Ricketts's data is statistically insufficient). That Ricketts deliberately excluded data from his report that was relevant to the central question of patentability is beyond the bounds of FRE 702. Ricketts refers to Appendix B in Paragraphs 318, 329, 342, 352, 418, 419, 421, and 424. Thus, Ricketts's conclusions in these paragraphs are not based on sufficient facts or data, as required by FRE 702, and should be excluded.

Likewise, Ricketts points to the "few" data points from Figure 2 in Paragraph 419 to arrive at his conclusions in Paragraph 421:

419. Figure 2 shows a zoom in span of voltage across C5 together with the LO pulses.



[FIGURE 2: Zoom in of portion of C5 voltage to demonstrate voltage points]

Exhibit 2021, ¶ 419 (annotated).

See also, TI-1051, 55:22-56:3. Also, Paragraph 421 uses a few points from Figure 2 to show charging and discharging percentages:

421. As an example for the few points shown in Figure 2 above, we will have the numbers shown below.

V(t0)	V(t1)	%
12.427	13.348	7.42 (charging)
13.146	13.052	-0.71
12.248	11.748	-4.08

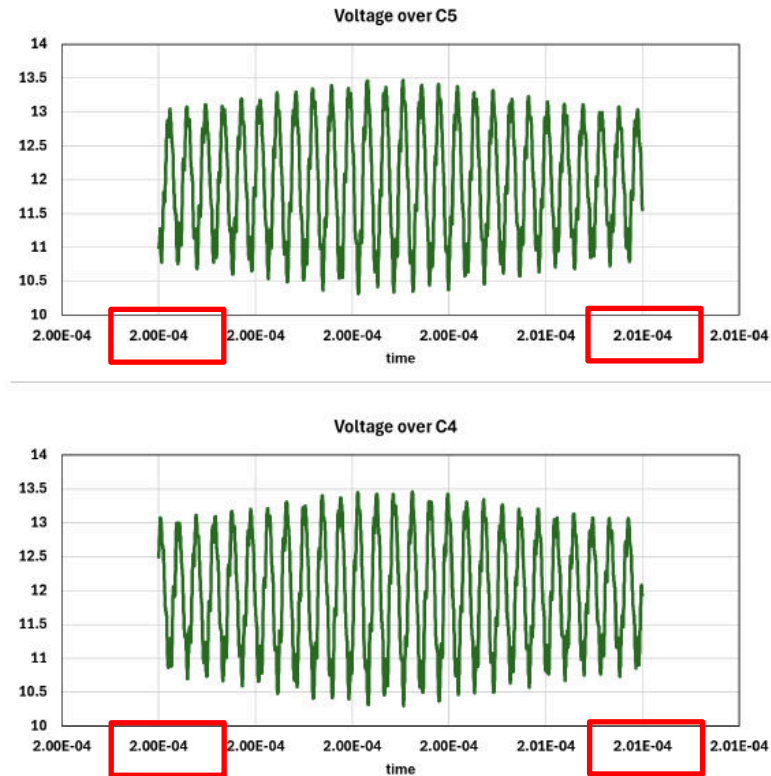
Exhibit 2021, ¶ 421 (annotated).

These “few” data points do not tell the whole story about the operation of the circuit, and are insufficient for an expert to draw any conclusions. As shown by

Dr. Galton, there are many instances of percentage discharges that range from 0 to 200%. Thus, a small sample space that shows discharge percentages outside the claimed ranges is not sufficient data; likewise, it confuses the issue, is prejudicial, and has no probative value. Therefore, it should be excluded.

The data shown in the graphs in Ricketts's Paragraph 418 only reflect 1 cycle of operation and 1 microsecond. Thus, these data are even more statistically insignificant than the data shown in Appendix B or Figure 2, and should also be excluded:

418. Figure 1 (below) shows voltage across C4 and C5 over **one full cycle** of the modulated IF signal, which contains multiple LO pulses (Modulation frequency 1MHz, IF frequency 26.9MHz, LO frequency 150MHz).



[FIGURE 1: Voltage across C5 and C4]

Exhibit 2021, ¶ 418 (annotated).

B. Ricketts's Conclusions Are Based on Flawed Methodologies

FRE 702 requires that an expert's testimony be the product of reliable principles and methods. Here, Ricketts's testimony in his declaration is not the product of reliable principles and methods because Ricketts selected (seemingly at random) a small sample set with a statistically insignificant amount of data from his simulations to draw conclusions about the DeMaw circuit operation. *E.g.*, TI-

1051, 60:20-61:7 (“I exported two of those cycles or 2 microseconds.”), 66:17-67:18 (“I exported the data for the timer period we discussed and then analyzed that.”). Ricketts testified that he observed that the circuit worked as intended, that a cycle would repeat, and therefore did not provide more than 2 cycles of data. TI-1051, 61:22-64:14. A qualitative assessment of the circuit operation is not a reliable method for determining that two cycles of data are representative of the circuit operation, particularly when small changes in charge ratios can result in the claimed percentages. Thus, the small sample set of data is unreliable for understanding whether there are any instances of the claimed discharge percentages. Thus, Paragraphs 318, 329, 342, 352, 418, 419, 421, and 424 of Exhibit 2021 that rely on such data should be excluded.

Note that Ricketts states that he ran the simulations reflected in Appendix B from a time 0 to a time “well beyond the time shown” in Appendix B; but he discarded that data and did not reproduce it in his declaration. TI-1051, 56:4-18, 59:21-61:20. Instead of using the data from that entire period of time to calculate the discharge percentages, Ricketts bases his conclusions on only a 2 microsecond window (i.e., 2 cycles of operation) that he selected after visually observing the results of the circuit simulation. TI-1051, 56:4-18, 59:21-61:20. Ricketts admits that he ignored at least 10 microseconds of initial data. TI-1051, 57:1-11. Ricketts claims that the initial data was outside “normal operation,” but since the claims do

not specify (or exclude) operating conditions for satisfying the claimed discharge percentages, it is not reasonable to exclude the data associated with the first 10 microseconds of circuit simulation runtime in his calculations. Thus, the conclusions that Ricketts reaches based on ignoring the initial data are flawed and should be excluded.

Next, Ricketts confirmed that he selected 2 cycles of the circuit (or 2 microseconds of circuit operation) based of his visual observation of the modulation cycle (as opposed to being based on a numeric analysis of the actual voltage values). TI-1051, 59:21-61:7. A visual observation of the modulation cycle is not a reliable method for determining that the data repeats with sufficient precision as to not affect the magnitude of the discharging and charging ratios. Put differently, that the modulation cycle repeats is not indicative of the magnitude of the charging and discharging percentages occurring during the entire operation of the circuit. Thus, relying on the cycle repeating to select a subset of data is a wholly unreliable methodology.

Also, as mentioned before, Ricketts admits that the Appendix B data only represents a small subset of simulation time, and that he had run the simulation for much longer. TI-1051, 54:5-17, 57:1-11, 61:8-20. Ricketts was unable to specify how long he ran the simulations for or how much data resulted from the simulations. TI-1051, 56:16-25, 61:8:20. Thus, presenting and analyzing data

from such a short period of time reflects unreliable methodologies.

For these reasons, Ricketts testimony pertaining to the DeMaw circuit simulations is not based on reliable methodologies and should be excluded.

C. The Data in Appendix B Is Prejudicial, Confusing, and Has No Probative Value

As mentioned before, the data in each table in Appendix B represents data collected for only 2 microseconds (2 cycles) of the DeMaw circuit simulations run by Ricketts. Because the sample set is so small and deliberately does not include at least the first 10 microseconds of data, the data in the tables in Appendix B is confusing, prejudicial, and does not have probative value. By only showing the data from a very small sample space, there is not enough data for Ricketts's to conclude that the DeMaw circuit does not satisfy the claimed discharged percentages. Again, viewing Dr. Galton's simulations, there are instances of discharge percentages within the claimed values, but there is also a non-zero number of discharge percentages outside of these claimed ranges. Because the data can create confusion but has no probative value, it should be excluded under FRE 403.

III. CONCLUSION

For the above reasons, Petitioner respectfully requests the exclusion of paragraphs 318, 329, 342, 352, 418, 419, 421, 424, and Appendix B of Exhibit 2021 from the evidentiary record in this proceeding.

Respectfully submitted,

Dated August 11, 2025

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CERTIFICATE OF SERVICE

Pursuant to 37 CFR §§ 42.6(e)(1) and 42.6(e)(4)(iii), the undersigned certifies that on August 11, 2025, a complete and entire copy of this Petitioner's Motion to Exclude was provided by email to the Patent Owner by serving the email correspondence address of record as follows:

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