

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION

PARKERVISION, INC.,

Plaintiff,

v.

INTEL CORPORATION,

Defendant.

Case No. 6:20-cv-00108-ADA

JURY TRIAL DEMANDED

**PLAINTIFF PARKERVISION, INC.'S REPLY BRIEF  
IN FURTHER SUPPORT OF ITS MOTION FOR SUMMARY JUDGMENT**

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## INTRODUCTION

Intel tries to create factual disputes where none exist. Intel attempts to distract from the straight-forward issues before the Court by citing a litany of so-called “facts.” These “facts,” however, do not matter to the issues the Court has to decide. They simply have nothing to do with the relevant issues on summary judgment.

With respect to marking relating to third-party products/chips (post-July 13, 2016 Samsung phones and a Realtek chip in ParkerVision’s Milo WiFi product), Intel ignores the undisputed fact that Intel has *no technical basis* whatsoever to assert that the products practice any ParkerVision patent. Indeed, Intel admits that it relies *solely* on allegations made by *ParkerVision* in complaints in other cases related to *different* products/chips and, in some instances, *different* patents. Intel’s own expert has not even addressed marking issues. And Intel’s attorney argument/interpretations, based on ParkerVision’s statements regarding *different* products/chips, are *not facts* – and cannot meet Intel’s burden of production.

With respect to other ParkerVision products (SignalMax) and ParkerVision’s own chips (PV5870) -- when they should have been marked, they were marked. Indeed, Intel does not challenge the grant of summary judgment for ParkerVision’s SignalMax line of products (defined in the opening brief as the “ParkerVision Products”). With respect to the PV5870 chip, it is undisputed that the product page for the PV5870 is marked with ParkerVision patents covering that product. So Intel tries to create a fact issue by citing to a *different* page on the website that Intel says was not marked. But there is no requirement to mark patents every time a product is discussed on a website. And there can be no reasonable dispute that ParkerVision’s marking is sufficient. Thus, there are not disputed facts.

With respect to validity, Intel tries to obfuscate the issues by citing to a variety of “facts” – but these “facts” have nothing to do with the relevant issues on summary judgment. Looking at

the undisputed material facts, summary judgment is appropriate. *First*, it is undisputed that all asserted claims other than claim 5 of the '673 patent require an “energy transfer system” and that Intel’s expert largely ignores that requirement as well as the “baseband signal portion” element of the '528 and '736 patents. *Second*, it is undisputed that Intel’s expert did not combine any references that disclose a differential amplifier that outputs a “differential” signal as claimed in the '736 and '528 patents. *Finally*, it is undisputed that the '736 and '528 patents disclose a differential output and that Intel’s expert never addressed this disclosure. Intel’s attorney arguments cannot sidestep these facts.

With respect to infringement, it is undisputed that Intel’s expert presented [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Nothing that Intel raises changes this fact.

For the foregoing reasons, ParkerVision’s motions for partial summary judgment should be granted.

### **ARGUMENT**

#### **I. PARKERVISION IS ENTITLED TO SUMMARY JUDGMENT ON MARKING**

##### **A. ParkerVision is Entitled to Summary Judgment on the Milo Products.**

Intel does not dispute that it did *nothing* to investigate whether or not the Realtek RTL8811AU chip (a third-party chip) in ParkerVision’s Milo product practices any claim of any asserted ParkerVision patent. Indeed, Intel admits that it does not even have any information regarding the RTL8811AU. Thus, Intel has no technical information of any kind that could serve as a basis for a good-faith belief that the RTL8811AU practiced any claim of any asserted patent. Doing *nothing* does not clear any bar – however low – for meeting Intel’s burden of production. That should end the inquiry.

Instead of putting any effort into determining whether the asserted patents cover the RTL8811AU chip, Intel focuses on an allegation ParkerVision made in a complaint filed against Buffalo, Inc. related to the Buffalo AirStation products (“Buffalo Complaint”). But ParkerVision alleged infringement by Buffalo AirStation products that included *different* Realtek chips (RTL8812AU and RTL8192BU). ParkerVision never accused any product with the RTL8811AU of infringement. And, as ParkerVision’s expert (Dr. Steer) explained in his expert report, one cannot draw any conclusions about the configuration/operation of the RTL8811AU from the Realtek chips set forth in the Buffalo Complaint. *See* D.I. 176-5 at ¶¶ 64, 77-83. This opinion is un rebutted because Intel’s expert does not even address the issue at all.

Intel cannot – as a matter of law – contort previous ParkerVision allegations regarding *different* specifically accused Realtek chips to support a baseless claim (relying solely only on attorney argument) that the RTL8811AU in ParkerVision’s Milo product practiced the asserted patents. It is simply not a plausible allegation. The complaint included very specific allegations – that specific chips performed certain functions required by enumerated patents – that do not apply to the RTL8811AU chip that was never mentioned in the Buffalo Complaint.

Notably, Intel admits that ParkerVision itself did not have the information necessary to determine infringement with respect to the RTL8811AU. Nonetheless, at the same time, Intel suggests that the allegations in the Buffalo Complaint can be construed in a way to suggest that ParkerVision brought allegations against the RTL8811AU without a good-faith basis. Intel’s wayward attorney argument that the allegations of the Buffalo Complaint include *all* Buffalo AirStation products is not viable and should be rejected.

In its opening brief, ParkerVision asserts that Intel failed to point to any facts indicating that any Buffalo AirStation with a RTL8811AU chip was ever even sold in the United States.

Intel calls this a “strawman.” But without any facts concerning sales of those products (or other acts of infringement) in the United States, Intel cannot argue that the RTL8811AU was the subject of the lawsuit in federal court. Without any acts to accuse of infringement, Intel’s contortions to expand the scope of the Buffalo Complaint beyond its contents are further revealed to be unsupported and implausible.

In short, the Buffalo Complaint itself, the lack any supporting technical analysis, the lack of infringement allegations that could even make Intel’s over-reaching theory possible, and the expert testimony before the Court, all warrant a finding that Intel has not met its burden of production.<sup>1</sup>

Realizing that it came up short in discovery, Intel made a last-ditch effort to shore-up its marking defense by seeking for Jeff Parker, ParkerVision’s CEO (not an attorney), to interpret the Buffalo Complaint. Mr. Parker’s deposition testimony, however, cannot change the scope of the allegations actually made in the Buffalo Complaint or be used to contradict the undisputed facts above. Nor can his testimony create issues of fact to preclude summary judgment against Intel. Intel tries to make much ado about Mr. Parker’s testimony. But Mr. Parker’s 30(b)(6) designation to testify about the actual “marking . . . of” products, does not come close to covering legal interpretations of complaints relating to chips not found in any ParkerVision product (and never subject to marking). Nor can Intel stretch any other 30(b)(6) topic to include legal opinions related to products in the Buffalo Complaint. Nevertheless, in the end, Mr. Parker

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<sup>1</sup> In addition, Intel cites to no case requiring that a patent owner reverse-engineer component parts used in its products to investigate alleged marking obligations. Such a requirement would expand the scope of marking obligations beyond any reasonable reach. For instance, a manufacturer of airplanes would need to reverse engineer thousands of components (that include proprietary information to which it has no access) to fully comply with potential marking obligations.

merely confirmed language in the Buffalo Complaint that was *not* in any paragraph containing an infringement allegation. To the extent that Intel seeks to rely on these irrelevant snippets of testimony from Mr. Parker, Mr. Parker has clarified that testimony. *See* D.I. 207-2. Thus, there is no dispute of any material facts.

Lastly, the two unpublished district court decisions cited by Intel do not help Intel (nor can they change the standard contemplated by the Federal Circuit in *Arctic Cat*). In these cases, the patent owner specifically stated that the patent covered an unmarked product. *See KAIST IP US LLC v. Samsung Elecs. Co.*, 2018 WL 10498197, at \*3 n.1, 2018 U.S. Dist. LEXIS 234952, at \*12 n.1 (E.D. Tex. May 22, 2018) (patentee “specifically alleged” products “were covered by the ’055 patent”); *Semcon IP Inc. v. Huawei Device USA Inc.*, 2017 U.S. Dist. LEXIS 37035, \*3, \*6 (E.D. Tex. Feb. 20, 2017) (motion based on licensee’s failure to mark licensed products “covered by the ’061 patent”). Neither dealt with a situation, like the one here, where a party tried to extend assertions beyond those specifically made in a complaint against a third party. In addition, neither case involves unrebutted expert opinion’s – like those provided by ParkerVision’s expert here – that defeat the plausibility of extending the allegations in the Buffalo Complaint to cover unaccused products.<sup>2</sup>

Moreover, the Intel-cited *Semcon* case itself explains why Intel cannot prevail with respect to the ’474 patent asserted against Intel. The ’474 patent was *not* asserted in the Buffalo

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<sup>2</sup> And neither case purports to stand for the proposition that zero technical analysis is needed to meet a burden of production. *Semcon* addressed the timeliness of a defendant’s joinder to a motion made by a co-defendant that had already met the burden of production concerning a licensee’s failure to mark with detailing all the evidence before it with respect to the co-defendant that met its burden. *Semcon IP Inc. v. Huawei Device USA Inc.*, No. 2:16-cv-00437-JRG-RSP, 2017 U.S. Dist. LEXIS 204266, at \*9 (E.D. Tex. 2017). And *KAIST* references claim charts regarding the relevant licensee’s products practicing of the patent and eventually denies summary judgment due to the fact that defendants themselves “provide no technical analysis of the processors in question.” 2018 U.S. Dist. LEXIS 234952, at \*6, \*12-13.



Litigation (or the Hisense litigation also mentioned in Intel’s interrogatory response) against *any* Realtek chip. With respect to this patent, Intel merely asserts that the asserted patents were “related” – despite Dr. Steer opining that it cannot be concluded that the ’474 patent is practiced based upon allegations that different patents were practiced by different products. *See* D.I. 207-5 at ¶¶ 64, 69-83. Intel, on the other hand, relies solely on attorney argument/interpretation and provides no expert opinion at all. As the *Semcon* court noted, carrying a burden of production with respect to one patent, does *not* relieve a defendant carrying its independent burden with respect to related patents. *Semcon IP Inc. v. Huawei Device USA Inc.*, No. 2:16-cv-00437-JRG-RSP, 2017 U.S. Dist. LEXIS 204266, at \*12 (E.D. Tex. 2017) (“Without a showing that [defendant’s] initial burden of production has been met with respect to the other three patents, there is no clear basis to conclude that [patentee] must also prove compliance with the marking statute with respect to these other three patents.”)

**B. ParkerVision is Entitled to Summary Judgment on the PV5870.**

**1. The ’736 and ’673 patents.**

Intel admits that its contention that the PV5870 practices the ’736 and ’673 patents is based *solely* on ParkerVision’s allegations in an ITC case “mapping the PV5870 to *different patents.*” *See* D.I. 204 at 5. Intel does not deny that the ’736 and ’673 patents contain *different* limitations than the patents asserted in the ITC case (only one of which, the ’528 patent, is asserted in this case). Intel does not contest that ParkerVision’s expert, Dr. Steer, pointed out the additional limitations that Intel cannot plausibly allege are practiced by the PV5870. And Intel does not contest that it presented no technical analysis from an expert of any kind. Yet, Intel baldly claims that its mere *attorney argument* “exceeded” its burden and relies on the assertion that there is a “close relationship” between the patents that ParkerVision claims to be practiced and the ’736 and ’673 patents. While the patents may all relate to “down-conversion”

technology, that does not mean (nor could it) that the scope of all the patents is the same. And, despite any relationship amongst the patents, it is undisputed that Intel has not presented any expert technical analysis to suggest in any way that the PV5870 practiced the additional claim elements found in the '736 and '673 patents. Intel has not presented any admissible evidence on that point, and it has not come close to meeting its burden of production.

**2. PV5870 was marked with '902, '474, '725, and '528 patents.**

It is undisputed that the product packaging and/or manuals/specifications for the PV5870 all included a notice that the product was “protected by one or more U.S. patents” and directed customers to “ParkerVision.com.” When a customer visited the ParkerVision website, after clicking on the “Products” heading and selected the product of interest (here the PV5870), the customer was taken to the PV5870 product page that had a complete list of ParkerVision patents covering the PV5870, including the '902, '474, '725, and '528 patents. *See* D.I. 176-18 at PV\_049929. Thus, it is undisputed that ParkerVision marked the PV5870 with these patents.

Intel cannot create a factual dispute by complaining that the patent list was on the PV5870 product page. Those are the patents that specifically covered the PV5870, which is precisely the “associate[ion] of the patented article with the number of the patent” required by section 287. *See* 35 USC 287(a). As such, there was no “research project” for a customer; the customer – who had in hand the packaging or manual/specification they were inquiring about – would simply click on the PV5870 product on the ParkerVision website and be informed of the tailored *subset* of all of ParkerVision’s patents that covered the product under a collapsible heading entitled “Patents Covering the PV5870”:

⌵ Patents Covering the PV5870	
No.	PatentTitle
9118528	Method and system for down-converting an electromagnetic signal, and transforms for same, and aperture relationships

*Id.* Intel’s citation to *Mfg. Res. Int’l* regarding “research projects” is irrelevant to the facts here. That case dealt with a situation where the patentee listed *all* its patents (not just the patents covering its products) on a website without the required association between patents and covered products. *Mfg. Res. Int’l v. Civiq Smartscales, LLC*, 397 F.Supp. 3d 560, 577-78 (D. Del. 2019). Here, the website directly associated the relevant patents with the PV8570 product as depicted above.

Patentees, like ParkerVision, are permitted to exercise reasonable judgment when implementing the precise mode of marking. *Sessions v. Romadka*, 145 U.S. 29, 50 (1892) (in terms of mode of marking, “something must be left to the judgment of the patentee”); *see also Bonito Boats, Inc. v. ThunderCraft Boats, Inc.*, 489 U.S. 141, 168 (1989) (Section 287 is a “notice requirement” that is “designed ‘for the information of the public.’”); *Nat’l Prods. v. Arkon Res., Inc.*, No. CV 18-02936 AG (SSx), 2019 U.S. Dist. LEXIS 42119, at \*50 (C.D. Cal. 2019) (motion for no pre-suit damages *denied* notwithstanding that website visitors had “to additionally navigate to a ‘Patents and Trademarks’ page of the website to see a listing of [plaintiff’s] patents.”); *Rutherford v. Trim-Tex, Inc.*, 803 F. Supp. 158, 161 (N.D. Ill. 1992) (recognizing the Supreme “Court’s long-standing focus on the notice effected by the method of marking the patented article rather than on the precise mechanistic compliance with the statute.”); America Invents Act, 112 H. Rpt. 98 (“The [America Invents Act] permits patent holders to ‘virtually mark’ a product by providing the address of a publicly available *website* that associates the patented article with the number of the patent.”).<sup>3</sup>

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<sup>3</sup> Intel’s citation to *A to Z Machining* is also irrelevant. That case found a failure to mark because the packaging insert said *nothing* about patents and did not inform a customer that the product was patented or that the notice related to patent marking. *A to Z Machining Serv. v. Nat’l Storm Shelter, LLC*, No. Civ-10-422-C, 2011 U.S. Dist. Lexis 149387, \*9 (W. Okla. Dec. 29, 2011).

Nor can Intel create a fact dispute by citing a single webpage (captured over different months) from the WayBack machine that includes a description of the PV5870 that does not contain patent number lists. Just like there is no requirement to mark each of the product, packaging, literature, and website, there is no requirement that *every* page on the website that references a product must repeatedly be marked with a list of patents. And Intel did not cite any case to the contrary.

Marking in one website location is enough and there is no dispute that product landing page for the PV8570 was marked with the asserted patents. Thus, summary judgment is appropriate that Intel has no marking defense with respect to this product.

**C. ParkerVision is Entitled to Summary Judgment on the Samsung Galaxy S5 and S6.**

Intel glosses over the undisputed fact that is the crux of the dispute – Intel does not know what chips were in any Samsung S5 or S6 sold in the United States after the July 13, 2016 license to Samsung. It has *nothing* on which to base a good-faith assertion that such phones practiced any ParkerVision patent. Intel did *zero* analysis (technical or otherwise) to determine what chips were in those phones or whether those chips practiced any claim of any ParkerVision patent. And ParkerVision *never* asserted that any of the chips in those post-July 13, 2016 phones did so.

Quite simply nothing remains in dispute other than Intel’s unsupported and baseless *attorney argument* that phones sold after July 13, 2016 *possibly* could have had infringing chips in them. The chip – not the phone – determines whether or not a device using those chips practices the claims. Because Intel has not, and cannot now, put forth any factual information

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Here, it is undisputed that the packaging (and specifications) indicated that the PV5870 was “protected by one or more U.S. patents” and directed customers to ParkerVision’s website.

whatsoever to support a claim that any Samsung S5 or S6 sold after July 13, 2016 in the United States practiced any claim of the patents-in-suit, Intel has not met its burden. Summary judgment is therefore appropriate that Intel has no marking defense related to Samsung phones.

**D. ParkerVision is Entitled to Summary Judgment on the ParkerVision Products.**

ParkerVision moved for summary judgement regarding the “ParkerVision Products” (which include the SignalMax WLAN 1500, USB1500, WLAN 300, WR1500 and WR3000). Intel did not respond and, thus, does not contest summary judgment that Intel has no marking defense with respect to these products.

**II. SUMMARY JUDGMENT OF VALIDITY IS APPROPRIATE**

**A. The Asserted Claims of the ’736 Patent are Valid.**

There is no dispute that Dr. Subramanian did not offer an opinion of invalidity under the claim language, as written. ParkerVision’s expert analysis for infringement considered, in the alternative, the current claim language and the modified language used by Dr. Subramanian. Intel now represents that the modified language is the correct language and that the claim language should be corrected to reflect that fact. Consequently, ParkerVision will agree to the proposed correction and withdraw its motion relating to this ground.

**B. The Asserted Claims Reciting “Energy Transfer System” are Valid.**

It is undisputed that Intel’s expert did not establish that the prior art teaches the claimed “energy transfer system.” Rather, Intel points to portions of its expert’s report which, by its own characterization, “explained how the prior art operated in the same manner as the Intel Products.” *See* D.I. 204 at 14 (citing D.I.176-22 at ¶¶ 326-334, 511-513, 520, 564, 565-566, 981-985, 1388-1392, 1772-1776, 2135-2139, 2535-2539, 2947-2953. *See also Id.* at 15 (citing D.I.176-22 at ¶ 494 and conceding that Dr. Subramanian “explained that the accused Intel capacitors do not

discharge energy to form a down-converted signal but nevertheless *operate in the same manner as the cited prior art* in terms of discharging energy.”)

As explained more fully in the following subsection, “an accused infringer cannot . . . establish invalidity merely by pointing to similarities between an accused product and the prior art.” *01 Communique Lab., Inc. v. Citrix Sys.*, 889 F.3d 735, 742 (Fed. Cir. 2018). But that is *all* Intel argues here. Intel’s invalidity defense depends entirely on an impermissible argument that because its products are allegedly similar to the prior art, they are excused from the burden of showing by clear and convincing evidence that a POSITA would understand that the prior art discloses the “energy transfer system” limitation. That is not the law.

**C. Dr. Subramanian Failed to Conduct a Proper Invalidity Analysis.**

Relying on *01 Communique*, Intel asserts that Dr. Subramanian’s invalidity analysis – which compares the prior art to the accused products instead of the asserted claims – is proper. It is not. To the contrary, *01 Communique* hurts Intel’s position. Intel cites *01 Communique* for the unremarkable proposition that a claim can be invalid in view of the prior art if the patentee attempts to expand the scope of the claim too broadly in a manner that includes the prior art.

But Intel ignores the fundamental tenet re-iterated in *01 Communique* that “an accused infringer *cannot . . . establish invalidity merely by pointing to similarities between an accused product and the prior art.*” *01 Communique Lab’y, Inc. v. Citrix Sys., Inc.*, 889 F.3d 735, 741-742 (Fed. Cir. 2018) (emphasis added). Yet, this is exactly what Dr. Subramanian has done repeatedly with regards to the prior art. In particular, Dr. Subramanian points out the similarities between the prior art (Razavi, Traylor, BBA2, RF100, PMB 2407) and Accused Chips to determine that the claim elements are met.



For each element of an Asserted Claim, [defendant’s expert]: (1) identifies features in the Accused Products that [patentee’s expert] contends reads on that claim element; (2) opines the prior art has features ‘analogous’ to the features identified by [patentee’s expert]; and (3) concludes the Asserted Claim must therefore be invalid. This type of analysis is legally flawed and risks possible jury confusion.

*Realtime Data LLC v. EchoStar Corp.*, No. 6:17-CV-00084-JDL, 2018 U.S. Dist. LEXIS 202797, at \*10 (E.D. Tex. 2018) (*citing 01 Communique*).

Dr. Subramanian’s mix-and-match comparisons between the accused products and the prior art cannot substitute for a proper comparison of the claim elements to the prior art and an explanation as why the pieces of prior art could be combined. In the absence of the proper analysis, summary granted should be granted.

**D. Claims 5 and 9 of the ’528 Patent and 1 and 27 of the ’736 Patent are Valid.**

Intel admits that Tayloe and Palmer do not disclose outputting a differential signal as the claims of the ’528 and ’736 patents require. D.I. 204 at 18 (“Dr. Subramanian does not dispute that the differential amplifiers in Tayloe and Palmer output ‘single-ended’—rather than ‘differential’ — signals . . .”). That admission should resolve this issue, because Dr. Subramanian also never discloses a combination of references which discloses outputting the claimed differential signal.

Recognizing they have a failure of proof, Intel attempts to rely on Dr. Subramanian’s discussion of obviousness. But uttering the word “obviousness” is not a magical cure-all, especially here. Here, Intel points to an earlier section of Dr. Subramanian’s report (which was cited in Dr. Subramanian’s Tayloe discussion) to support its attorney argument that it would be obvious to modify Tayloe’s differential amplifier to output a differential signal. *Id.* But that section relates to a *different* combination – Razavi and Palmer – and provides no analysis of



*Tayloe* whatsoever or why it would be obvious to modify the specific configuration of *Tayloe* to generate a differential output.

Moreover, Intel cannot simply rely on its expert's *subjective* and *conclusory* views to overcome the *express* disclosure of a single-ended signal in *Tayloe* and *Palmer*. Intel cites to a passage where Dr. Subramanian explains that two types of amplifiers exist in the world – some output single-ended signals and some output differential signals. While such an argument could theoretically justify combining *Tayloe* with a reference showing an amplifier outputting a differential signal, it does not justify what Dr. Subramanian has done. In particular, Dr. Subramanian specifically chose to combine *Tayloe* with *Palmer* – a reference showing an amplifier outputting *signal-ended* signal. He cannot now use the mere existence of differential signals in the world to argue that it would be obvious to modify the configuration of *Palmer* that he chose to combine with *Tayloe*. He cannot just change *Palmer* to be something that it is not. *See Sitrick v. Dreamworks, LLC*, 516 F.3d 993, 1001 (Fed. Cir. 2008) (“Conclusory expert assertions cannot raise triable issues of material fact on summary judgment.”) And, importantly, Dr. Subramanian provided no justification doing so with respect to this combination. Thus, partial summary judgment is appropriate.

**E. The '528 and '736 Patents Disclose Differential Output.**

Dr. Subramanian asserts that the '528 and '736 patents fail to disclose a differential amplifier outputting a differential signal, thus allegedly rendering claims of the '528 and '736 patents invalid under section 112. But there is no dispute of fact that the patents unquestionably disclose this novel feature.

In a differential amplifier, there are two types of outputs – a single-ended output (shown as one line coming out of a triangle) and a differential output (shown as two lines coming out of a triangle). Dr. Subramanian claimed that there was no disclosure of a differential output. In

particular, he pointed to figures in the '528 and '736 patents showing a single-ended output as his proof. But, in his analysis, he either overlooked or ignored Figure 201 and the corresponding description in the '528 and '736 patent – which depicts a differential amplifier with two lines coming out – a differential output.

So, Intel tries to salvage its claim on summary judgment by cobbling together an attorney argument based on unrelated snippets from Dr. Subramanian's report. This tack cannot raise a dispute of material fact as Dr. Subramanian *never* discussed Figure 201 and its related description in his voluminous report. Only ParkerVision's expert, Dr. Steer, addressed Figure 201 and its related description. Dr. Steer straightforwardly states that Figure 201 and its related description discloses a differential output. *See* D.I. 176-5 at ¶¶ 661-662, 2150-2151. While Intel attempts to point to other portions of Dr. Steer's report, those portions address different issues and do not negate Dr. Steer's clear opinion on this issue. Because Dr. Subramanian did not address this in his expert report (and examined only the single-ended output embodiments), there is no testimony to contradict Dr. Steer that there is an embodiment illustrating a differential output. Accordingly, there is no dispute of material fact that there is a disclosure of a differential amplifier with a differential output.

### **III. INTEL MEETS THE CHARGING AND DISCHARGING CLAIM ELEMENTS**

In its opening brief, ParkerVision pointed to certain charts that Intel's expert prepared.

[REDACTED]

[REDACTED]

[REDACTED]. Intel does

not address these charts. Instead, Intel cites a litany of extraneous information that does nothing to contradict what is clearly shown in these charts. Citing irrelevant "facts" is not sufficient to

raise a dispute of facts as to the specific issues that ParkerVision raised. Accordingly, partial summary judgment is appropriate with regard to the charging and discharging claim terms.

Dated: November 22, 2022

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**CERTIFICATE OF SERVICE**

I hereby certify that on this 22nd day of November, 2022, a true and correct copy of the foregoing document was forwarded by electronic mail to all counsel of record for Defendant Intel Corporation.

Dated: November 22, 2022

/s/ Raymond W. Mort, III  
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