

IPR2021-00985
U.S. Patent No. 7,292,835
Patent Owner's Opposition

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TCL Industries Holdings Co., Ltd. and Hisense Co., Ltd.,
Petitioners

v.

ParkerVision, Inc.
Patent Owner

U.S. Patent No. 7,292,835

Issue Date: November 6, 2007

Title: WIRELESS AND WIRED CABLE MODEM APPLICATIONS OF
UNIVERSAL FREQUENCY TRANSLATION TECHNOLOGY

Inter Partes Review No. IPR2021-00985

**PATENT OWNER'S OPPOSITION TO PETITIONERS' MOTION FOR
ROUTINE AND/OR ADDITIONAL DISCOVERY**

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Pursuant to the Board’s March 9, 2022 email, Patent Owner ParkerVision, Inc. (“ParkerVision”) submits this opposition to the motion for routine and/or additional discovery filed by TCL Industries Holdings Co., Ltd. (“TCL”) and Hisense Co. Ltd. (“Hisense”) (collectively, “Petitioners”).

I. Introduction.

Petitioners seek the production of highly confidential Final Infringement Contentions (“FICs”) that ParkerVision served in the parallel district court litigation. But Petitioners’ Motion is merely an attempt to supplement their evidence/arguments under the guise of routine and/or additional discovery.

For the first time in *this* Motion, Petitioners’ present substantive arguments regarding the Texas District Court’s construction of “storage module” as “storing non-negligible amounts of energy.” *See* Paper 18 (“Motion”), 4-7. But as ParkerVision pointed out in its Patent Owner’s Response, the Petition is altogether silent as to whether a capacitor (the alleged “storage module”) in the cited references “stores non-negligible amounts of energy.” Paper 17 (“POR”), 1. In fact, the phrase “non-negligible amounts of energy” does *not* appear anywhere in the Petition. Although Petitioners were aware of the District Court’s construction at the time of filing their Petition, Petitioners *chose* not to address it. Thus, any discussion that Petitioners make of “non-negligible amounts of energy,” including through the reliance on ParkerVision’s FICs, is improper new argument that goes

beyond the theories presented in the Petition. For at least this reason, the Board should deny Petitioners' Motion.

Petitioners' arguments that the FICs should be considered "routine" and/or "additional" discovery also fail. Contrary to Petitioners' assertions, no inconsistencies exist between ParkerVision's arguments in its POR and those presented in the FICs. Furthermore, Petitioners have not shown that such discovery is necessary in the interest of justice.

Accordingly, the Board should deny Petitioners' request.

II. Petitioners' belated and improper efforts to bolster its Petition through discovery should be rejected.

In January 2021, the Texas District Court construed "storage module" as "a module of an energy transfer system that stores non-negligible amounts of energy from an input electromagnetic signal." Ex.-2011, 5.¹ Petitioners filed their Petition in May 2021 – *four months after* the District Court's order construing "storage module," *two months after* ParkerVision served its Preliminary Infringement Contentions in the District Court, and *nine days after* ParkerVision filed its POR in IPR2020-01265. Thus, when filing the Petition, Petitioners were fully aware of the

¹ The parties agree that the January 2021 District Court Claim Construction Order is relevant to the current IPR because it relates to ParkerVision patents involving similar technology to the '835 patent.

District Court’s construction and ParkerVision’s arguments regarding “storage module.” Indeed, the Petition specifically discusses the District Court’s construction of “storage module.” Pet., 34-35.²

Yet, Petitioners failed to address the “*non-negligible amounts of energy*” language in their Petition (despite being aware of this language in the District Court’s construction at the time they filed their Petition, specifically addressing *other* language in the District Court’s claim construction ruling, and ultimately adopting the language in their own constructions in litigation). In fact, the words “non-negligible,” “energy,” or “non-negligible amounts of energy” do *not* appear in the Petition at all. Instead, the *only* argument/theory Petitioners put forth was simply to identify “storage modules” as capacitors in the cited references. *See* Pet., 60, 63, 74-75. Tellingly, the Petition does not even mention—let alone provide *any* *type* of analysis—as to whether a capacitor (the alleged “storage module”) in the cited references “stores non-negligible amounts of energy.”

² And while Petitioners included the cover page of ParkerVision’s Preliminary Infringement Contentions as evidence that their Petition was filed “expeditiously” (*see* Pet., 87,) Petitioners never discuss their relevance and/or significance in connection with the term “storage module.”

Petitioners now attempt to remedy their deliberate omission by substantively addressing the “non-negligible amounts of energy” language in this Motion. Indeed, Petitioners’ Motion spends several pages doing exactly that. *See* Motion, 4-7. In particular, Petitioners present a new theory alleging that ParkerVision previously “argued that ‘transferring nonnegligible amounts of energy’ means ‘transferring energy (i.e., voltage and current over time) in amounts that are distinguishable from noise.’” *See* Motion, 4-6. To support its new theory, Petitioners improperly rely on new evidence.³ *See id.* (citing new evidence: *ParkerVision, Inc. v. Qualcomm Inc.*, No. 3:11-CV-719-J-37TEM (M.D. Fla. Feb. 20, 2013); *ParkerVision, Inc. v. Qualcomm Inc.*, 621 F. App’x 1009, 1018 (Fed. Cir. 2015); *RPX Corp. v. ParkerVision, Inc.*, IPR2014-00948). But as the Consolidated Trial Practice Guide states: “[i]t is also improper for a reply to present new evidence . . . that *could have been presented* in a prior filing.”

³ Petitioners should not be able to change its positions set forth in the Petition with its belated, new theories. *See Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1369 (Fed. Cir. 2016) (“It is of the utmost importance that petitioners in the IPR proceedings adhere to the requirements that the initial petition identify ‘with particularity’ the ‘evidence that supports the grounds for the challenge to each claim.’”).

Consolidated Trial Practice Guide (Nov. 2019) at 73-74.⁴ Given that Petitioners could have addressed these arguments/evidence in their Petition, it would be improper to allow Petitioners to obtain the FICs in order to do so in their Reply.

III. Petitioners’ request for ParkerVision’s confidential Final Infringement Contentions is not directed to “routine” discovery.

Petitioners argue that the FICs are required “routine” discovery under 37 C.F.R. § 42.51(b)(1)(iii) because they purportedly contradict the construction of claim terms “storage module and “cable modem” advanced by ParkerVision. But Petitioners are incorrect. Petitioners’ conclusions are based on a mischaracterization of ParkerVision’s positions. As such, Petitioners’ request for discovery should be denied.

A. ParkerVision’s positions on “storage module” are consistent.

In its POR, ParkerVision requested the Board to adopt the District Court’s construction of “storage module” as “a module of an energy transfer system that stores non-negligible amounts of energy from an input electromagnetic signal.” POR, 50. ParkerVision then addresses the cited prior art in light of its proposed construction.

Recognizing the deficiencies in their Petition after reading the POR, Petitioners allege that ParkerVision further construes the phrase “non-negligible

⁴ Unless indicated otherwise, all emphasis is added.

amounts of energy” as requiring “a complex, three-step calculation that compares the calculated total ‘available energy’ to the ‘energy in a capacitor.’” Motion, 4; *see also id.*, 7 n.4 (“ParkerVision’s brand new argument that non-negligible amounts of energy must be mathematically calculated, as a percentage of the total available energy that is stored in a capacitor.”). Petitioners contend that because ParkerVision did not disclose this same “complex, three-step calculation” in its FICs, ParkerVision takes inconsistent positions. *See* Motion, 7. But Petitioners are wrong.

First, ParkerVision did *not* construe the phrase “non-negligible amounts of energy” in its POR, let alone propose a construction requiring “a complex, three-step calculation that compares the calculated total ‘available energy’ to the ‘energy in a capacitor,’” as Petitioners suggest. Instead, ParkerVision clearly articulates that its analysis is *one* of several possible calculations that a POSITA would use to determine energy storage *based on a specific cited reference*. When analyzing the Hulkko reference, for example, ParkerVision states that “[g]iven Hulkko’s disclosure of Candy, one way to determine energy storage is to perform calculations based on a time constant.” POR, 63. When examining the Schiltz reference, on the other hand, ParkerVision states that “given Schiltz’s configuration as well as Schiltz’s component values and voltage source information, one way to determine energy storage is to perform calculations based

on ratio of available RF input power to IF output power.” POR, 74. As such, there is nothing in ParkerVision’s POR to suggest “non-negligible amounts of energy” requires any one specific mathematical calculation.

Second, and contrary to Petitioners’ argument, ParkerVision’s analysis is consistent with positions that ParkerVision advanced in other proceedings. In its POR, ParkerVision asserts that whether a capacitor is a “storage module” depends on the *way* in which the capacitor is being used in a circuit. ParkerVision makes clear that one cannot simply look at individual components of the circuit because the same components (e.g., capacitors) used in different circuits can be used in *different* ways to create a desired result. *See, e.g.*, POR, 27. Accordingly, ParkerVision’s energy storage calculation for a cited capacitor (the alleged “storage module”) in the prior art is based on the specific disclosure of each reference. This is consistent with the product-specific analysis ParkerVision has taken in other cases. *See* Motion, 5 (“ParkerVision’s inventor, Mr. Sorrells ‘explained at trial that transferring a non-negligible amount of energy into the storage capacitor means ‘that you have to transfer enough energy to overcome the noise *in the system* to be able *to meet your specifications*;’”), *see also id.*, 6 (“Mr. Sorrells testified that when *a product functions according to its specifications*, this “is proof that a ‘nonnegligible’ amount of energy is transferred to the storage element *in those products*.”).

The fact that ParkerVision’s FICs do not recite the exact same formulas as provided in the POR is inconsequential. And it should be noted that Petitioners have yet to produce any technical documents in the district court litigation, and ParkerVision plans to supplement its FICs based on information obtained as the case progresses. But a lack of information in the district court does not equate to the inconsistencies that Petitioners allege here.

Because there are no inconsistent statements in the documents Petitioners seek, ParkerVision has no duty to produce them as “routine discovery,” and the Board should deny Petitioner’s motion.

B. ParkerVision’s positions on “cable modem” are consistent.

The preamble in claim 1 of the ’835 patent recites: “A cable modem for down-converting an electromagnetic signal having complex modulations, comprising,” In its POR, ParkerVision argues that the preamble is limiting. To support its position, ParkerVision relies on the ’835 specification, which specifically states that a “cable modem” “refers to [a] modem[] that communicate[s] across ordinary cable TV network cables.” POR, 51 (citing Ex.-1001, 36:19-20). ParkerVision further notes that the specification distinguishes a cable modem from a data modem, which communicates across telephone lines. *See id.*

Petitioners allege that ParkerVision’s POR as to the meaning of the “cable modem” term is inconsistent with its FICs. In particular, Petitioners point to a single sentence in the POR that states: “what makes a modem a “cable” modem *relates* to the type of physical transmission line/cabling over which data is *ultimately transmitted.*” Petitioners fails to recognize the specificity in ParkerVision’s statement, and instead assert that it contradicts ParkerVision’s FICs which “allege that a Wi-Fi chip—a device that by definition has no physical transmission line or cabling—is a ‘cable modem.’” Motion, 8. Not so.

ParkerVision never argues in its POR that a cable modem must have a “physical transmission line or cabling” nor that a Wi-Fi chip cannot be a cable modem. In fact, when describing cable modems in the POR, ParkerVision specifically points to FIG. 45B of the ’835 patent (shown below) which illustrates a wireless cable modem environment.

4520

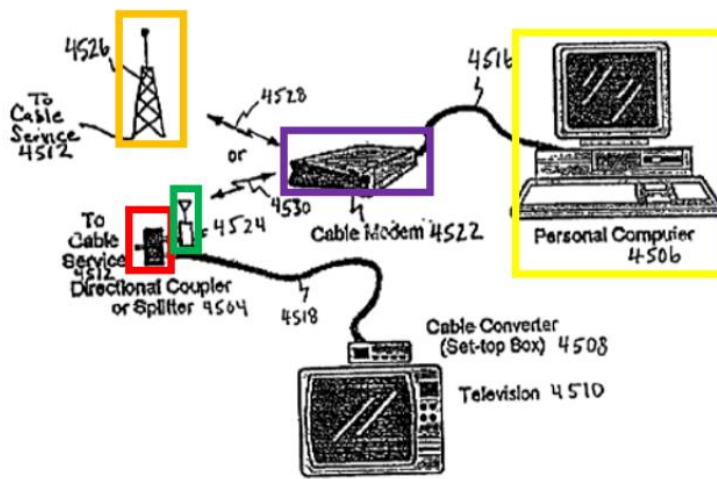


FIG. 45 B

As shown above, cable modem 4522 includes an antenna for wireless communication with wireless interface 4524 and antenna 4526. Notably, the configuration shown in FIG. 45B is like that of a Wi-Fi chip, which provides wireless connectivity using an antenna. As such, ParkerVision has not taken inconsistent positions, and Petitioners have failed to show otherwise.

IV. Petitioners have not met their burden on additional discovery.

Petitioners request for additional discovery should also be denied because Petitioners fail to carry its high burden to prove that the requested discovery is “necessary in the interest of justice.” 35 U.S.C. § 316(a)(5)); 37 C.F.R. § 42.51(b);

Garmin Int'l, Inc. v. Cuozzo Speed Techs. LLC, IPR2012- 00001, Paper No. 26 at 6-7 (PTAB Mar. 5, 2013).

A. Petitioners have not shown that the FICs will be useful.

The first *Garmin* factor is whether there exists “more than a possibility and mere allegation” that useful information will be discovered. *Garmin Int'l, Inc. v. Cuozzo Speed Techs. LLC*, IPR2012-00001, Paper 26 at 6 (PTAB Mar. 5, 2013). “Useful,” in this context, means “favorable in substantive value to a contention of the party moving for discovery”; it does not encompass evidence that is merely “relevant” or “admissible.” *Id.* at 7. Here, Petitioners admit that there is nothing of substance they seek to uncover in the FICs; instead, Petitioners seek to use the absence of information as proof of ParkerVision’s alleged inconsistent positions. *See* Motion, 7. But again, this argument relates more to the nature of the FICs at a stage in the litigation (when Petitioners have not produced technical documents) rather than any showing of inconsistencies between the information sought and ParkerVision’s positions in the POR.

Petitioners’ request for the FICs as additional discovery also fails for much the same reason as their request for routine discovery. Petitioners argue that the FICs would be useful because they are inconsistent with ParkerVision’s POR. Motion, 11. But, as explained in Section III above, there are no inconsistencies

between ParkerVision’s arguments in its POR and those presented in the FICs. As such, Petitioners’ request will not uncover any “useful” information.

B. The information Petitioners request could have been sought by other means.

Garmin factor 3 considers the ability to generate equivalent information by other means. *Garmin*, Paper 26 at 6. “Information a party can reasonably figure out or assemble without a discovery request would not be in the interest of justice to have produced by the other party.” *Id.* By Petitioners’ own admissions, prior ParkerVision proceedings contain the claim construction arguments Petitioners seek to reveal in the FICs. *See* Motion, 7 (“*In keeping with Mr. Sorrells’ testimony about how to prove that a capacitor has a ‘non-negligible’ amount of energy, ParkerVision’s Final Infringement Contentions against TCL and Hisense identify a capacitor in a Wi-Fi chip as a “storage module.”*”). Petitioners cannot reasonably maintain that such evidence did not exist or was previously unavailable at the time Petitioners filed their Petition. Instead, Petitioners had the opportunity to generate relevant information, but chose not to do so *nor* address the “non-negligible amounts of energy” language in the Petition at all. This was a strategic decision, and Petitioners’ gamesmanship should be rejected.

Dated: April 6, 2022

Respectfully Submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing **PATENT OWNER'S OPPOSITION TO PETITIONERS' MOTION FOR ROUTINE AND/OR ADDITIONAL DISCOVERY**, together with all exhibits filed therewith, was served in its entirety by filing these documents through the PTAB E2E System, as well as by email on the following counsel of record for Petitioner:

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