UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DISH NETWORK CORPORATION; DISH NETWORK L.L.C.; AND DISH NETWORK SERVICE L.L.C.,

Petitioners

v.

ENTROPIC COMMUNICATIONS, LLC,

Patent Owner.

PTAB Case No. IPR 2023-00392

Patent No. 7,542,715

PETITIONER'S REQUEST FOR DIRECTOR REVIEW

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I. INTRODUCTION

The Board's denial of institution in this case was based on a critical error the Board's complete disregard of the Carnero prior art's express disclosure of *remotely controlling* channel selection. Pointing specifically to those disclosures, Petitioners and their expert, Dr. Schonfeld, explained that it would have been obvious to use Fisk's server, which already receives channel requests, to remotely control Carnero's channel selection. Inexplicably, the Board rejected this argument without a word about either Carnero's remote control disclosures or Dr. Schonfeld's unrebutted expert testimony about them. Making matters worse, the Board's faulty conclusion flies in the face of the prosecution history, which unmistakably shows that remotely controlling channel selection was known in the art.

By failing to consider Petitioners' proffered evidence, including express support in the prior art and Dr. Schonfeld's unrebutted expert testimony, the Board abused its discretion and reached the wrong result in denying institution. Petitioners ask that the Director review the Board's decision, correct the error, and institute *inter partes* review.

II. FACTUAL BACKGROUND

A. The Disputed Claim Limitation

The Board's decision denying institution focused on particular language of limitation 9[b] of claim 9:

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a signal selector that receives a plurality of broadband LNB signals comprising a plurality of transponder signals, *the signal selector is responsive to transponder select information transmitted by the gateway and selects a plurality of transponder signals from at least one broadband LNB signal based on the transponder select information*;

(Pet. at *vi*;¹ *see* Paper 7 at 13-18.)

The Petition showed, and Patent Owner could not and did not dispute, that "[s]electing transponder signals from broadband satellite signals based on request information" was known in the art. (Pet. at 6.) As evidence, Petitioner pointed to Williams '873, a reference discussed and used to reject claims during prosecution of the '715 patent's parent application. (Id. (citing Ex. 1026 at 3:56-5:33, 5:45-6:9, Figs. 1, 3).) Williams '873 discloses a "transmodulator" that selects and processes transponder signals within a broadband signal to reduce bandwidth for distribution to receiver units. (Ex. 1026 at 3:56-64.) In a rejection, the examiner recognized that "Williams further discloses a signal distribution system wherein the *signal selector* is responsive to channel select information transmitted by a receiving unit." (Ex 1016 at 67-68 (citation omitted); see also Ex. 1026 at 3:67-4:3 ("The receiver units also send requests for user-selected channels to the transmodulator which uses these requests to select [w]hich of the portions of the broadband signal will be

¹ Unless otherwise indicated, all bold and italics has been added by Petitioner.

transmodulated."); *id.* at 4:12-15 ("A receiver [in the transmodulator] receives a request signal from each of the plurality of individual receivers and a controller selects the selected transponder signal in response to the request signals.").) Rather than traverse the rejection, the applicant amended the claims. (*See id.* at 80 - 91 (Aug. 9, 2005 amendment).)

As further evidence that the claimed selection of transponder signals based on request information was already known in the art, Petitioner pointed the Board to additional claim rejections during reexamination of the '715 patent's parent based on the Eutelsat Installer's Guide. (Pet. at 6 (citing Ex. 1017 at 277-279).) Citing the figure below, the examiner stated, "The Eutelsat Installers Guide discloses that *the signal selector is responsive to transponder select information transmitted by an IRD [integrated receiver decoder]*." (Ex. 1017 at 279.)



(*Id.* at 277 (highlighting added); *see also id.* at 281 ("Additionally, the Eutelsat Installers Guide at page 19 specifies that there is communication between the terminal (IRD) and the head-end (signal selector) '*so that remote channel selection can be carried out.*") (citation omitted).) Again, rather than traversing the prior art rejection, the patentee amended the claims. (*Id.* at 308-324 (Aug. 14, 2008 amendment).)

Nowhere in its preliminary response did Patent Owner dispute Petitioner's

assertion that Williams '873 and the Eutelsat reference disclose selecting transponder signals from broadband satellite signals based on request information. (*See* Paper 6 (not referencing Williams '873 or Eutelsat).) This point was entirely uncontested.

B. The Proposed Fisk-Carnero Combination

1. Fisk

Fisk discloses a system that uses a server to distribute television signals throughout a multi-unit dwelling, such as a hotel. (Ex.1003, Cover, 2:13-23.) The server distributes digital video signals based on requests from receivers or LCUs (local control units). (*Id.*, Abstract.)



Figure 5 (above, annotations added) depicts an exemplary system where each hotel guest room includes a TV and LCU 66. (Pet. at 20-21; Ex.1002, ¶ 89.) Server 56 inputs video signals from various sources, including satellite 22. (Ex.1003, 12:1-9.) Decoders 58 process the received satellite signals and provide digital MPEG video streams to the server. (*Id.* at 22:9-22.) When server 56 receives a television channel request from an LCU 66 in a guest room, the server transmits the digital

television signal over the network. (*Id.* at 6:7-21.) All requested media is provided by the server to the network via a single output cable 74 for distribution to the LCUs. (*Id.* at Fig. 4; Ex.1002, \P 89.)

2. Carnero

Carnero discloses a system "for distributing television signals of different channels." (Ex. 1004, Abstract.) The input channels are "individually selected from signals originating from one [or more] antenna[e]." (*Id.* at 3:9-11; Fig. 3 (showing three antennae).) Carnero discloses a signal processing unit 400 with channel-specific converters 4 that convert the selected channels from an input channel frequency to an output channel frequency. (*Id.* at Abstract, 3:48-52; 5:29-31.) The "converters 4 may include a microprocessor 49 that … determines the input and output frequency of the channel signal of the converters 4." (*Id.* at 8:9-11; Fig. 7.)

Carnero further describes an input unit 16 that can be used to control a channel converter via its microprocessor. (*Id.* at 8:12-15 (input unit 16 can supply "data of a pre-definable input and output frequency"); *see also id.* at 8:16-21.) The input unit may include a control unit 162 (and associated "program"), a keyboard 161 and a display 163. (*Id.* at 8:16-23.) Carnero also discloses, however, that "*input unit 16 may be designed as a remote-controlled transmitter* with a transmitting device, that *transmits the data to be input* to a receiver connected to the microprocessor 49 of the channel-specific converter." (*Id.* at 8:23-25.)

In its preliminary response, Patent Owner strains to box in Carnero as supposedly relating only to "community television systems" where "signal selection is predetermined in a remote location by human operators." (Paper 6 at 2, 15-17.) Patent Owner's argument is based on little more than Carnero's use of the innocuous phrase "community antenna system,"² which Patent Owner takes as license to import limitations from a separate, unrelated reference (Green). (See id. at 15-16 (repeatedly citing Ex. 1005 (Green) in characterizing Fisk and Carnero).) Patent Owner's characterization of Carnero as restricted to delivering a predetermined lineup of channels selected by the system operator is belied by Carnero's teachings about how channel selection provides the flexibility needed to meet evolving user demands for particular channels. (See Ex. 1004 at 3:11-12 ("Individual selection of channels can be used to meet the demand of system users for the reception of predefined channels."); id. at 3:15-17 ("[T]he invention, makes it possible to flexibly meet a changed demand of the system users with regard to the reception of pre-definable channels").³)

² The phrase "community antenna system" merely reflects that Carnero's system allows the same antenna or set of antennae to serve a community of users.

³ Carnero refers to channels as being "predefined" or "pre-definable" in the sense that they are received within a predefined frequency band. (Ex. 1004 at 3:15 ("The

3. The Fisk-Carnero Combination

The Petition asserted that it would have been obvious to add Carnero's "channel selection and combination system" to Fisk's signal distribution system. (Pet. at 29.) Petitioner explained that this would have simplified how Fisk's server receives satellite signals for distribution and ensured that Fisk's decoder receives desired programs in a manageable quantity while maintaining fidelity. (*Id.; see also* Ex. 1002, ¶ 103.) The Petition explained that Fisk's server 56—which already receives channel requests from LCUs—would use those requests to *remotely control* Carnero's channel-specific converters. (Pet. at 37-39; Ex. 1002, ¶¶ 119-121.) As discussed, Carnero discloses that the input unit 16 that controls channel selection "may be designed as a remote-controlled transmitter with a transmitting device, that transmits the data to be input to a receiver connected to the microprocessor 49 of the channel-specific converter." (Ex. 1004 at 8:23-25.)

III. ARGUMENT

C. The Board Abused Its Discretion By Ignoring Carnero's Disclosure of a Remote Control Input Unit

The Board gave two reasons for concluding that the Fisk-Carnero

channel-specific converters can be set to any frequency in a pre-definable frequency band"); *id.* at 8:19-20 (noting that transponder channels "correspond to predefined technical specifications").)

combination does not disclose limitation 9[b], neither of which addressed Petitioner's argument and evidence showing that it would have been obvious to use Fisk's server 56 as a remote control input device as Carnero discloses. (Paper 7 at 15-18.)

First, the Board disagreed with Petitioner's assertion that "Carnero does not disclose the source of the information input into the microprocessor that allegedly causes the microprocessor to select a channel." (*Id.* at 15.) The Board pointed to Carnero's disclosures about an operator entering data via a keyboard in the input unit. (*Id.* at 15-16.) Because the Board mistakenly viewed the input device as only enabling manual entry of channel selection data, it wrongly suggested that Petitioner's combination "requires replacing Carnero's input device 16 with Fisk's server 56." (*Id.* at 16.)

The Board completely missed that fact that Petitioner's assertion that Carnero does not disclose the source of the transponder selection information (and its broader obviousness argument) was based on Carnero's disclosures of the *remote control* input device:

The input device may be "a remote-controlled transmitter" to permit transmitting transponder selection information. (Ex.1004-Carnero, 3:48-53, 8:23-25; Ex.1002-Schonfeld, ¶119.) Carnero uses this input information to identify the transponder channel containing the requested television program and thus is the claimed transponder select information. (Ex.1002-Schonfeld, ¶119.) However, Carnero does not specify the source of its input.

(Pet. at 37-38.) Petitioner's expert, Dr. Schonfeld, who has extensive experience in the relevant technology, explained, "The input device may be a 'remote-controlled transmitter' *to permit transmitting transponder selection information (as opposed to direct input by, for example, a keypad)*." (Ex. 1002, ¶ 119; *see also id.* at ¶¶ 5-14 (discussing qualifications).) In the proposed combination, Fisk's server 56 would take on the role of a remote control input device that transmits responder selection information to control channel selection. (Pet. at 37-39; Ex. 1002 ¶¶ 119-121.)

Inexplicably, the Board's discussion of Carnero's input unit completely ignored the disclosures of the *remote control* input device that formed the basis for Petitioner's argument. (*See* Paper 7 at 15-16.) Indeed, the term "remote" appears only once in the Decision, and only in summarizing Petitioner's argument. (*Id.* at 14.)

Patent Owner's only response regarding Carnero's remote control input unit disclosures was to mischaracterize them to lessen their import. Patent Owner wrongly asserted, for example, that Carnero disclosed that "a remote-controlled transmitter with a transmitting device can be *attached to* the input unit 16." (Paper 6 at 25.) On the contrary, however, Carnero discloses that the "converter-external input device can ... be *designed as a remote-controlled transmitter*." (Ex. 1004 at

3:52-53; see also id. at 8:23-25 ("input unit 16 may be designed as a remote controlled transmitter").) Patent Owner also argued that the disclosures "only provide[] that the input unit 16 may *wirelessly transmit the manually entered input* information instead of using a wire." (Paper 6 at 27.) But this is just attorney argument, and weak attorney argument at that. Carnero never states or suggests that a remote control input device necessarily includes a keyboard or only permits transmission of manually entered channel selection information, and Patent Owner submitted no expert testimony to rebut the showing made by Dr. Schonfeld. Moreover, nothing in Carnero's disclosures suggests "remote" means "wireless" as opposed to "wired," as Patent Owner asserts; Carnero never even uses the term "wireless." (See Ex. 1004.) Patent Owner's overly narrow interpretation also ignores Carnero's teachings that channel selection provides the flexibility to meet changing user demands for particular channels. (Id. at 3:11-12 ("Individual selection of channels can be used to meet the demand of system users for the reception of predefined channels."); id. at 3:15-17 ("[T]he invention, makes it possible to flexibly meet a *changed demand of the system users with regard to the reception of pre-definable channels*").)

By ignoring Carnero's remote control input device disclosures and arbitrarily accepting Patent Owner's attorney argument over Petitioner's unrebutted expert testimony,⁴ the Board abused its discretion. *See, e.g., Juniper Networks, Inc. v. Correct Transmission, LLC*, No. IPR2021-00469, 2021 WL 3504495, at *9, Paper 10 at 21 (P.T.A.B. Aug. 9, 2021) ("At this stage and in the present context, Petitioner's unrebutted expert testimony outweighs Patent Owner's attorney argument.").

D. The Board Abused Its Discretion By Addressing Patent Owner's Straw-Man Rather Than Petitioner's Actual Argument Regarding Limitation 9[b]

The Board's second and ostensibly "[m]ore important[]" reason for finding that Fisk and Carnero failed to disclose limitation 9[b] was its agreement with Patent Owner that "Fisk does not teach or suggest that the LCU requests are intended to change the predetermined [channel] lineup." (Paper 6 at 16-18; *see also id.* at 16 ("[W]e agree with Patent Owner that the requests for programs generated by Fisk's LCUs are intended to select channels from a predetermined lineup of channels and are not disclosed as being able to change the channels in the predetermined lineup,

⁴ It is not entirely clear from the Decision whether the Board agrees with Patent Owner's overly narrow reading of Carnero's remote control input device disclosures. Although the Board generically cited to the page where Patent Owner made this argument, the Board did not specifically discuss or endorse the argument. (*See* Paper 7 at 15 (citing "Prelim Resp. 26-27").)

such that server 56 'can only distribute the decoded programs it is fed."").)

Here, the Board made two crucial errors. First, Petitioner did not argue that Fisk *actually disclosed* that the LCUs have the ability to change which channels are processed by the server 56. This was only a straw-man that Patent Owner had set up (and knocked down) in its preliminary response. (*See* Paper 6 at 17-24.) Indeed, the Board repeatedly cites to the portion of Patent Owner's paper that admittedly addresses *Fisk alone* rather than Petitioner's actual ground based on Fisk and Carnero together. (Paper 7 at 16-17 (citing Paper 6 at 20-21); *see also* Paper 6 at 17 (*"[B]efore addressing the deficiencies in the combination*, the *failures of Fisk* and Carnero *respectively* will be addressed first."); *id.* at 17-24 (Section titled: "The Identified Components of *Fisk* Fail to Meet Specific Claim Requirements."). The Petition was explicit in asserting that *"[t]ogether, the combination of Fisk and Carnero* render[] limitation [9(b)] obvious." (Pet. at 35.)

Second, the Board compounded its first error by treating *Fisk's* lack of disclosure as dispositive of the obviousness of limitation 9[b]. (*See* Paper 7 at 18 ("*Given that Fisk does not teach or suggest* that the LCU requests are intended to change the predetermined lineup, *there is no reason* for one of ordinary skill in the art to input the requests received by server 56 to signal processing unit 400.").) But the Petition provided other reasons to use Fisk's server 56 to remotely control Canero's signal processing unit. As discussed, Petitioner's argument is based on

Carnero's express disclosure of a remote control input device. (Pet. at 37-39; see also supra § III(A).) As also discussed, the prosecution history confirms that remotely controlled selection of transponder channels was known in the art. (See Pet. at 6; see also supra § II(A).) Because this way of selecting transponder signals was already known, it would have been obvious to combine Fisk and Carnero in the manner Petitioner proposed that enables this feature. See KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 417 (2007) ("[I]f a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill."). Finally, as noted, Carnero expressly links the selection of particular transponder channels to meeting user demands for particular channels. (Ex. 1004 at 3:11-12; 3:15-17.) Allowing the user requests for particular channels to drive channel selection at Carnero's signal processing unit, as Petitioner proposed, would ensure channels are selected to meet user demands.

IV. CONCLUSION

For the foregoing reasons, Petitioner respectfully requests Director Review of Paper 7 and institution of *inter partes* review.

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Dated: Sept. 11, 2023

Respectfully submitted,

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⁵ On Sept. 11, 2023, Petitioners requested authorization to file a motion to withdraw and substitute counsel. On the same date, Petitioners filed an updated Power of Attorney and Mandatory Notices listing Mr. McKeever as lead counsel.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true copy of this **PETITIONER'S**

REQUEST FOR DIRECTOR REVIEW has been served by electronic mail to the

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