NOTE: This disposition is nonprecedential.

# United States Court of Appeals for the Federal Circuit

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**IN RE: JEREMY BLACK, PATRICK H. HAYES,**
*Appellants*

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2018-1166

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Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. 13/542,146.

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Decided: July 8, 2019

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JAMES J. LUKAS, JR., Greenberg Traurig, LLP, Chicago, IL, argued for appellants. Also represented by GARY R. JAROSIK, MATTHEW J. LEVINSTEIN, SARA MASON SKULMAN.

JOSEPH GERARD PICCOLO, Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA, argued for appellee Andrei Iancu. Also represented by THOMAS W. KRAUSE, ROBERT MCBRIDE.

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Before LOURIE, O'MALLEY, and REYNA, *Circuit Judges*.

Opinion for the court filed by *Circuit Judge* REYNA.

Dissenting opinion filed by *Circuit Judge* O'MALLEY.

REYNA, *Circuit Judge*.

Jeremy Black and Patrick Hayes appeal from the decision of the U.S. Patent Trial and Appeal Board affirming the rejection of claims 1 and 3–15 of their patent application. Because substantial evidence supports the U.S. Patent Trial and Appeal Board's factual findings relating to its obviousness analysis, we affirm.

## BACKGROUND

### A. The '146 Application

Jeremy Black and Patrick Hayes ("Applicants" or "Appellants") filed U.S. Patent App. No. 13/542,146 ("the '146 application"), which is generally directed to "adapting various appliance control capabilities of a universal remote control system such that they may be ubiquitously accessed by personal communication devices within a wireless network." J.A. 100. Stated differently, the '146 application is directed to a system where personal communication devices, such as cell phones, can access a universal remote control to control other devices.

An exemplary embodiment of the '146 application is depicted below in Figure 4a.

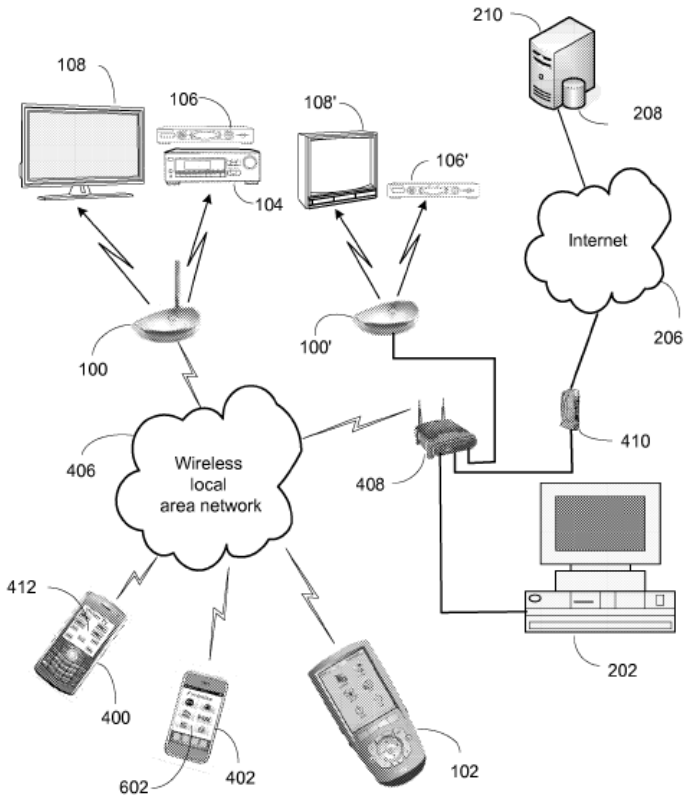


Figure 4a

'146 application, Figure 4a.

Figure 4a shows a wireless network as a means for communicating between personal communication devices and controllable appliances such as televisions and cable set-top boxes by way of a slave relay device. The '146 application states that "slave relay devices 100 and 100' . . . are also capable of serving HTML-formatted pages over local area network 406 as requested by browser-capable devices such as personal communications devices 400 or 402, thereby allowing such devices to be used as surrogate or additional universal controlling devices." J.A. 107.

The principal issue on appeal is whether the prior art discloses a tag file that includes both the definition of a controllable device and command data to be transmitted to the controllable device, as required by the claims of the '146 application. Claim 1, the only independent claim in the '146 application, is illustrative:

> 1. A slave relay station in communication with a personal communication device via a network, the slave relay station having a processing device and a non-transitory computer readable media on which are stored instructions which, when executed by the processing device, cause the slave relay station to perform steps for controlling a controllable device, comprising:
>
> causing a graphical user interface page to be provided to the personal communication device, the graphical user interface page having an activatable link that is associated with a tag file, *the tag file comprising both a definition of the controllable device and a listing of one or more commands to be transmitted to the controllable device*;
>
> receiving from the personal communication device via the network a request, the request containing data that functions to indicate that the activatable link of the graphical user interface page was selected; and
>
> in response to receiving the request, executing the tag file *whereupon a communication protocol corresponding to the definition of the controllable device contained in the tag file* associated with the activatable link *is used to transmit directly to the controllable device the one or more commands contained in the tag file* associated with the activatable link;

> wherein the data that functions to indicate that the activatable link of the graphical user interface was selected comprises data that is usable by the instructions to select from a plurality of tag files that have been associated with a corresponding plurality of activatable links of the graphical user interface page the tag file that is to be executed.

J.A. 192 (emphases added). The emphasized language represents the "tag file limitation" that is central to the dispute on appeal.

B. Procedural History

On June 5, 2015, the Examiner issued a final rejection of all pending claims of the '146 application. J.A. 163–64. The Examiner rejected claims 1 and 3–15 in light of a combination of U.S. Patent No. 7,631,197 by Niwamoto ("Niwamoto");[1] U.S. Patent Application Publication US 2005/0097618 by Arling ("Arling"); and U.S. Patent Application Publication US 2003/0095211 by Nakajima ("Nakajima"). J.A. 164–75. Applicants subsequently appealed to the U.S. Patent Trial and Appeal Board ("Board").

The Board affirmed the Examiner's rejection in its Decision on Appeal. J.A. 7–16. In affirming, the Board relied on the reasoning, findings, and conclusions of the Examiner. The Board also construed the term "tag file" as "a data structure that defines the action to be taken by the slave relay station, such as the command to be transmitted to a controllable device, upon receipt of a control command (e.g., activation of an HTML tag) from a client/control device." J.A. 10, 12. The Board further concluded that Arling

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[1] Niwamoto is not relevant to the tag file limitation at dispute on appeal. Therefore, we do not address it here.

in combination with Nakajima teaches the tag file limitation.

The Arling reference is generally directed "to controlling home appliances and, more particularly, relates to a system and method for allowing a user to save, recall, and transfer both media playback and device setting states for one or more sets of home appliances." Arling ¶ 2. The Board relied on the disclosure in paragraph 30, provided below, to conclude that Arling "teaches a data structure that defines the command to be transmitted to a controllable device, upon activation of a tag at a control device." J.A. 14. Paragraph 30 corresponds to Figure 1, also provided below.

> [C]orresponding data elements for source appliances 12a that may be saved for subsequent command generation, conversion and/or playback include TV related data 122a (e.g., channel, brightness, contrast, etc.), receiver data 121a (e.g., mode, volume, surround state, etc.), and networked appliance data 123a (e.g., media source, output, media playback position, etc.). The data elements 121a, 122a, and 123a may be saved in any known format, for example as an XML file (e.g., as contemplated by the UPnP specification), or spreadsheet/database entries on central state server 14, such that further operations as described below may be performed on the data. Once saved in the central state server 14 (or on remote control 10 and/or any other appliance 12), *data set 132 may be used to generate command data (i.e., IR or RF based appliance commands) which may then be assigned as a macro command or other immediately available command set on remote control 10 for use by a user in effecting recall of the device and media states on source appliance set 12a.*

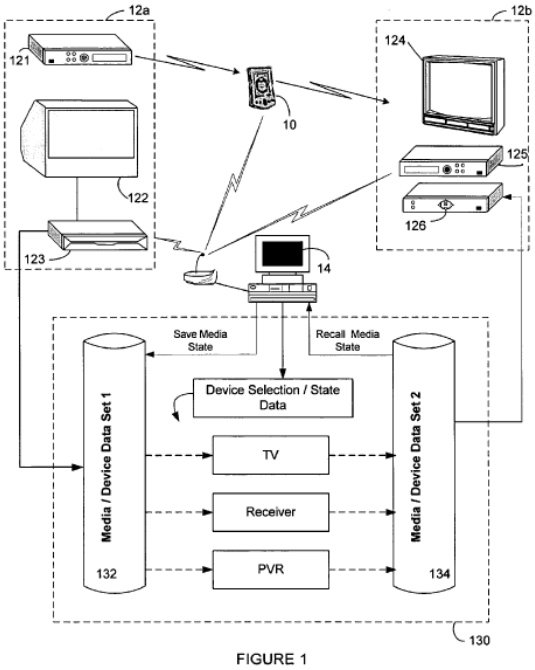


FIGURE 1

J.A. 14 (quoting Arling ¶ 30) (emphasis in Board Decision).

Arling, Figure 1.

Nakajima is directed to "a field extensible, controllee sourced universal remote control method and apparatus for remotely controlling electronic devices, such as a television (TV), set-top box, video cassette recorder (VCR), digital versatile disk (DVD) player, and so forth." Nakajima ¶ 1. The Board cited paragraph 51 of Nakajima as teaching the tag file limitation of the '146 application in conjunction with Arling. Nakajima discloses

> [S]ystem memory 604 and mass storage 606 are employed to store a working copy and a permanent copy of the programming instructions implementing the earlier described functions of TV 102, i.e. acceptance of control end user interface specifications from auxiliary devices 104–108, generation of their control end user interfaces, and provisions of the generated control end user interfaces, as well

> as acceptance of control commands targeted for itself and relay of control commands targeted for applicable ones of auxiliary devices 104–108.

Nakajima ¶ 51. The Board concluded that Nakajima's TV is a slave relay station within the meaning of the '146 application and "stored programming instructions are encompassed within the broadest reasonable definition of a tag file" because the programming instructions enable the TV to generate and provide control instructions, i.e., tags, and relay them to auxiliary devices, i.e., controllable devices. J.A. 15–16. The stored programming instructions also enable the slave relay station, i.e., Nakajima's TV, to accept commands from a control device such as Nakajima's universal remote. *Id.*

The Board also found that Nakajima "teaches directly providing commands to controlled devices" from the slave relay station (Nakajima's TV). J.A. 14. The Board found that Nakajima teaches that "the slave relay station responds to the activation of a tag at the control device to transmit a control command directly to the controllable device." J.A. 16.

For the same claim element—transmitting commands directly to the controllable device—the Examiner noted that Nakajima "discloses a graphical user interface with activatable links (Figures 3A–C) and further provides functionality of selecting and providing XML language with content that corresponds to the page to be executed [*sic*] further the commands can be directly provided (Figure 8 and Paragraphs 31, 34, and 51)." J.A. 167. The Examiner later appeared to rely on a different configuration of elements in Nakajima for the direct transmission element, describing direct transmission of commands from the remote to Nakajima's TV. J.A. 200 (citing Nakajima ¶¶ 31, 34, 35, Figures 2 and 8).

As for a motivation to combine Arling and Nakajima, the Board appears to rely on the reasoning of the

Examiner, presumably because Applicants did not object to the Examiner's explanation for a motivation to combine the references. The Examiner explained that both references disclose "the functionality of providing the file with device information," in the form of a tag file. J.A. 167; *see also* J.A. 166. Such functionality "provides an established system of accessing information improving overall operability." J.A. 166, 167. The Board agreed with the Examiner but did not explicitly provide a motivation to combine Arling and Nakajima.

After the Board issued its Decision on Appeal, Applicants filed a request for rehearing. The Board denied the request in its Decision on Request for Rehearing and made "explicit that which was implicit in the Decision [on Appeal]." J.A. 5. The Board expanded its analysis of Arling, stating that "[i]mplicit in [its] finding is our agreement with the Examiner that Arling's teaching of command conversion to address a particular controllable device teaches 'both a definition of [the particular] controllable device and a listing of one or more commands to be transmitted . . . to that controllable device,' as recited in claim 1." J.A. 4. The Board reasoned that Arling discloses generating commands for various appliances like TVs, audio receivers, and network appliances. Therefore, the Arling invention must generate different types of commands for different devices. Thus, implicit in Arling's disclosure is storage of both device definitions for different devices, as well as commands to be sent to those different devices.

Applicants timely appealed. We have jurisdiction under 28 U.S.C. § 1295 and 35 U.S.C. § 141(a).

## DISCUSSION

Appellants present two questions on appeal: (1) whether Arling and Nakajima disclose the tag file limitation recited in the '146 application; and (2) whether the Board adequately provided a motivation to combine Arling and Nakajima in light of the Board's "new" findings

regarding the prior art disclosures. We address each issue in turn.

This court reviews the Board's factual findings for substantial evidence and its legal conclusions de novo. *See In re DiStefano*, 808 F.3d 845, 848 (Fed. Cir. 2015) (citing *In re Gartside*, 203 F.3d 1305, 1315–16 (Fed. Cir. 2000)). Obviousness under 35 U.S.C. § 103 is a "mixed question of fact and law." *Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1366 (Fed. Cir. 2016). What a prior art reference discloses and whether there is a motivation to combine are each questions of fact reviewed for substantial evidence. *In re Kahn*, 441 F.3d 977, 985 (Fed. Cir. 2006); *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998).

On appeal, Appellants direct their arguments only to Claim 1 of the '146 application. Appellants contend that Arling fails to disclose a tag file that contains both a definition of a controllable device and a listing of one or more commands to be transmitted to said controllable device.

Appellants do not contest the Board's construction of "tag file." They argue that the teachings of Arling do not satisfy the tag file limitation recited in claim 1 of the '146 application. Specifically, Appellants contend that data set 132 in Arling (see Figure 1 above) is first saved as an XML file and is then modified by device definitions 135 to generate command data set 134. Put another way, Appellants contend that Arling does not teach a tag file that contains both command data and device definitions and transmits commands directly to a controllable device. We disagree.

The Examiner found that paragraph 30 of Arling teaches device conversion definitions saved as an XML file that executes the commands to defined controllable devices. Citing Figure 1 and paragraphs 29 and 30, the Examiner further explained that the XML file in Arling may contain infrared (IR) or radio frequency (RF) based appliance commands, indicating that the commands are

transmitted directly to the controllable device. The Examiner explicitly found the XML files in Arling to be the tag files discussed in the '146 application and that these XML files contained commands and device definitions that are transmitted directly to the controllable device, as required by claim 1.

The Board affirmed the Examiner's findings and agreed that Arling teaches converting commands to address a particular controllable device. The Board reasoned that Arling discloses generating commands for various appliances like TVs, audio receivers, and network appliances. Therefore, the Arling invention must have the ability to command different devices. As a result, Arling teaches the storage of device definitions and commands, including transmission of said commands to these different devices.

Appellants argue that the Board's and Examiner's reading of Arling is unreasonable because the disclosure describes a tag file (data set 132) without command data or device definitions because the command (data set 134) does not exist until it is subsequently generated using a device definition stored on the remote control. Appellants' arguments are not persuasive for two reasons. First, it is reasonable to read Arling and conclude that the commands and device definitions may exist in a single tag file in light of the knowledge of a person of ordinary skill. A person of ordinary skill in the art attempting to solve a problem is not wholly restricted to the literal confines of the prior art. We may assume that "familiar items may have obvious uses" and that a person of ordinary skill may draw upon her knowledge and creativity to solve the same problem. *KSR Intern. Co. v. Teleflex, Inc.*, 550 U.S. 398, 420–21 (2007) ("A person of ordinary skill is also a person of ordinary creativity, not an automaton."). Therefore, drawing upon the creativity of a person of ordinary skill, it is not unreasonable to conclude that Arling implicates a tag file containing both commands and device definitions such that

the commands are transmitted directly to controllable devices.

Second, Appellants' individual attack on the Arling disclosure is improper when the Board rejected the '146 application based on the combined teachings of Arling and Nakajima. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097–98 (Fed. Cir. 1986) ("Non-obviousness cannot be established by attacking references individually where the rejection is based upon the teachings of a combination of references." (citations omitted)). We must read Arling in combination with Nakajima for what these references teach as a whole. Together, these references are reasonably read to teach the elements of claim 1 of the '146 application.

The Board read paragraph 51 of Nakajima to disclose stored programming instructions (tag file) that enable the TV (slave relay station) to provide control instructions and relay them to auxiliary devices, i.e., controllable devices. J.A. 15–16. These stored programming instructions thus contain the command to be transmitted to the controllable device. Nakajima acknowledges that these auxiliary devices include VCRs, DVD players, and home theater audio control units. J.A. 37 ¶ 39. We therefore hold that substantial evidence supports the finding that Arling and Nakajima disclose a tag file that embodies the limitations recited in claim 1 of the '146 application.

Appellants do not seriously contend that Nakajima fails to disclose direct transmission of commands to controllable devices. They instead attack the Board's purported lack of disclosure of a motivation to combine Nakajima with Arling because the Board relied on a combination of elements in Nakajima different from those relied upon by the Examiner to meet the direct transmission element. As a result, Appellants contend that the Board affirmed the rejection on new grounds thereby requiring that we remand. We disagree.

The hallmark of whether the Board made a new ground for rejection is whether Appellants had an opportunity to respond to "the thrust of the rejection." *In re Leithem*, 661 F.3d 1316, 1319 (Fed. Cir. 2011) (quoting *In re Kronig*, 539 F.2d 1300, 1302–03 (CCPA 1976)). Appellants had the opportunity to respond to the Board's grounds for rejection in the Request for Rehearing. They failed to raise any arguments regarding the Board's purported failure to disclose a motivation to combine based on the alleged new grounds of direct transmission or the Board's reliance on paragraph 51 of Nakajima. Appellants instead argued that none of the prior art references disclose the tag file limitation.

Appellants' position ignores that both the Examiner and the Board rely on paragraph 51 to show Nakajima teaches direct transmission. Appellants further disregard the Board's explicit reliance on the Examiner's findings and conclusions in its Decision on Appeal. J.A. 10 ("[W]e refer to . . . the Final Office Action . . . and Answer . . . for the reasoning, findings, and conclusions of the Examiner."). The Examiner and the Board each found that Nakajima discloses the direct transmission element of claim 1 of the '146 application. The Examiner further articulated a motivation to combine Arling and Nakajima during prosecution, stating a person of ordinary skill in the art would have wanted "the functionality of providing the file with device information as constructed by Nakajima . . . because it provides an established system of accessing information improving overall operability." J.A. 167. Yet Appellants did not object to this particular finding in either the Request for Rehearing or their appeal brief before the Board. Because Appellants have had a fair opportunity to respond to both the Board's and Examiner's grounds for rejection, we see no basis to conclude that the Board made a new ground of rejection here. *See In re Stepan Co.*, 660 F.3d 1341, 1343 (Fed. Cir. 2011) ("Whether the Board relied on a new ground of rejection is a legal question that we review de novo." (citations omitted)).

## CONCLUSION

We recognize our prior admonitions to the Board that it support its determinations with clear, expressed reasons. *E.g.*, *In re Nuvasive, Inc.*, 842 F.3d 1376, 1383–85 (Fed. Cir. 2016). While in this case the Board's determination may be said to lack a high degree of specificity or detail, the grounds for rejection in this case are sufficiently present in the Examiner's reasoning and conclusions, the Board's Decision on Appeal, and the additional reasoning in the Decision on Request for Rehearing. This court has previously upheld Board rejections based on obviousness when the Board's "path may reasonably be discerned," even if "its conclusions are cryptic, but . . . supported by the record." *In re Huston*, 308 F.3d 1267, 1280–81 (Fed. Cir. 2002); *see also In re Applied Materials, Inc.*, 692 F.3d 1289 (Fed. Cir. 2012). We see no reason why, under these facts, it would not be possible to discern the grounds for the Board's rejection on this record. Accordingly, we affirm.

**AFFIRMED**

## COSTS

No Costs.

NOTE: This disposition is nonprecedential.

# United States Court of Appeals for the Federal Circuit

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**IN RE: JEREMY BLACK, PATRICK H. HAYES,**
*Appellants*

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2018-1166

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Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. 13/542,146.

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O'MALLEY, *Circuit Judge*, dissenting.

The majority finds substantial evidence supporting the Board's factual findings relating to its obviousness analysis, and concludes that the grounds for rejection are "sufficiently present" in some combination of the examiner's rejection, the Board's decision on appeal, and the Board's rehearing decision, I disagree. I find the Board's analysis insufficient to allow for meaningful appellate review. Because "we may not supply a reasoned basis for the agency's action that the agency itself has not given," and because this is not a case where "the agency's path may reasonably be discerned," I dissent. *See Bowman Transp., Inc. v. Arkansas-Best Freight Sys., Inc.*, 419 U.S. 281, 285–86 (1974) (citing *SEC v. Chenery Corp.*, 332 U.S. 194, 196 (1947)). I would remand the Board's decision holding the claims of the '146 application unpatentable as obvious and direct the Board to fully set forth the reasons why it believes one of

ordinary skill in the art would have been motivated to combine the relevant prior art references.

As the majority correctly recognizes, claim 1 of the '146 application contains a "tag file limitation" which includes "both a definition of the controllable device and a listing of one or more commands to be transmitted to the controllable device." J.A. 192. Claim 1 also discloses "executing the tag file whereupon a communication protocol corresponding to the definition of the controllable device contained in the tag file associated with the activatable link is used to transmit directly to the controllable device the one or more commands contained in the tag file." *Id*. Therefore, to satisfy claim 1's "tag file limitation," the tag file must be "associated with the activatable link" and include both: (1) a definition of the controllable device; and (2) a listing of one or more commands to be transmitted to the controllable device. *Id*.

The Board found that "Arling teaches a data structure that defines the command to be transmitted to a controllable device, upon activation of a tag at a control device." *Ex Parte Black*, No. 2016-7690, 2017 Pat. App. LEXIS 5591, at *11 (P.T.A.B. June 2, 2017) (*Board Decision*). The Board separately agreed with the Examiner that "Nakajima teaches directly providing commands to controlled devices." *Id*. at *12. As the majority recognizes, however, the Board did not explain why a skilled artisan would have had a motivation to combine Arling and Nakajima.

Applicants filed a request for rehearing, asserting that "no reference of record discloses, teaches, or suggests a tag file that comprises **both** a definition of a controllable device **and** a listing of one or more commands to be transmitted directly to that controllable device" as recited in claim 1. *Ex Parte Black*, No. 2016-7690, 2017 Pat. App. LEXIS 7780, at *2 (P.T.A.B. Aug. 11, 2017) (*Rehearing Decision*) (emphasis in original). In its rehearing decision, the Board

indicated that it "agreed with the Examiner that the *combination* of Arling and Nakashima [sic] taught the 'tag file' and its further limitations." *Id*. at *3–4. The Board explained that, implicit in its prior decision was "agreement with the Examiner that Arling's teaching of command conversion to address a particular controllable device teaches 'both a definition of [the particular] controllable device and a listing of one or more commands to be transmitted . . . to that controllable device,' as recited in claim 1." *Id*. at *4.

In affirming the Board, the majority finds that "Arling teaches the storage of device definitions and commands" and finds it "reasonable to read Arling and conclude that the commands and device definitions may exist in a single tag file." Maj. Op. at 11. The majority maintains that the Board rejected the '146 application based on the combined teachings of Arling and Nakajima, and that substantial evidence supports that finding. To the contrary, however, as explained below: (1) Arling does not disclose the "tag file limitation;" and (2) the Board has never even discussed why there would have been a motivation to combine Arling and Nakajima to arrive at the claimed limitation.

First, although the Board found that Arling "teaches a data structure that defines the command to be transmitted to a controllable device, upon activation of a tag at a control device," the record demonstrates that Arling does not, by itself, disclose the "tag file limitation" as claimed. *Board Decision*, 2017 Pat. App. LEXIS 5591, at *11. In its analysis, the Board pointed to paragraph 30 of Arling, which provides, in part, that:

> data set 132 may be used to generate command data (i.e., IR or RF based appliance commands) which may then be assigned as a macro command or other immediately available command set on remote control 10 for use by a user in effecting recall

> of the device and media states on source appliance set 12a.

*Id.*

Although the Board found data set 132 sufficient for "commands to be transmitted" and Arling's disclosure of "device definitions" sufficient for the device definition limitation of claim 1, it failed to identify disclosure of a single tag file that contains *both* the device definition and command data to be transmitted to a controllable device. Indeed, Figure 2 of Arling demonstrates that the device definitions 135a and command data 134 are separately stored:

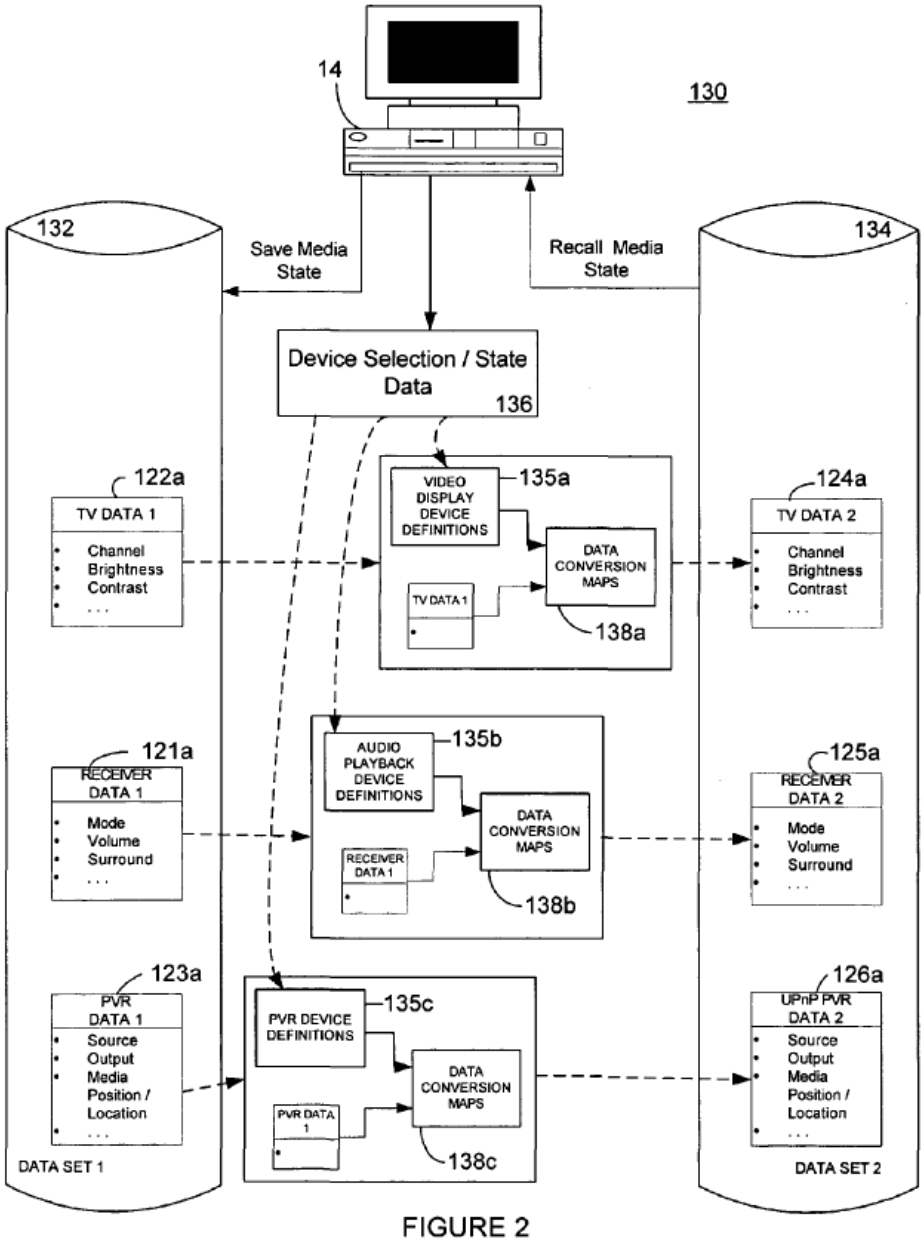


FIGURE 2

Arling explains that "data set 132 is composed of state and media data captured from a set of source appliances and media." J.A. 57 at ¶ 30. Figure 2 demonstrates that

data set 132 and the device definitions 135 are separate files that can be used to generate another separate file: the output data set 134. Because data set 134 does not exist until it is generated, data set 134 cannot be contained in a single tag file along with the device definitions.[1] As such, Arling does not expressly disclose the claimed "tag file limitation."

For its part, the Board provided no explanation of how Arling discloses the combined storage of device definitions and command data and made no factual finding that combining the two would have been obvious to a person of ordinary skill in the art at the time of invention. In its decision denying rehearing, the Board asserted that, "[t]o be able to generate the different types of commands that can be sent to these different types of devices, Arling must store both device definitions for the different devices, as well as the commands that can be sent to the different devices." *Rehearing Decision,* 2017 Pat. App. LEXIS 7780, at *4–5. To the extent this single sentence can be construed as a finding that Arling inherently discloses the "tag file limitation," it is insufficient to justify the Board's obviousness determination.

We have explained that inherency "must be carefully circumscribed in the context of obviousness." *Par Pharm., Inc. v. TWI Pharm., Inc.*, 773 F.3d 1186, 1195 (Fed. Cir. 2014). A party must, therefore, satisfy a "high standard in order to rely on inherency to establish the existence of a

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[1] Arling explains that the device definitions are used to generate command data, further demonstrating that the command data transmitted is not contained within the device definitions. J.A. 58 at ¶ 301 ("In general, the device selection/state data 136, device definitions 135, and data conversion maps 138 are used in converting or modifying data set 132 to data set 134.").

claim limitation in the prior art in an obviousness analysis"—the limitation at issue either necessarily must be present, or must be the "natural result of the combination of elements explicitly disclosed by the prior art." *Id.* at 1195–96. As Appellants point out, the examiner never found that Arling inherently disclosed the "tag file limitation." Nor did the Board provide any explanation or support for its apparent inherency finding. As such, the Board's cursory statement on rehearing cannot substantiate its obviousness analysis.

The majority suggests that our focus should be on the combination of Arling and Nakajima, rather than Arling alone. But at oral argument, counsel for the government asserted that the Board's rehearing decision found that Arling discloses all components of the claimed "tag file limitation." *See* Oral Arg. at 18:09–30, available at http://oralarguments.cafc.uscourts.gov/default.aspx?fl=2018-1166.mp3. ("It took two decisions for the Board to really show how Arling discloses the three parts—the tag file part, the command control, which comes from the specification that the Board found, and the definition of controllable device and set of commands."). As such, to the extent the majority attempts to sidestep problems with the Board's obviousness analysis based on Arling alone by saying that the Board did not rely on it exclusively, the government apparently does not agree. As the majority points out, moreover, the examiner relied on Nakajima as disclosing the direct transmission element of claim 1—not the other components of the "tag file limitation."

Second, although the majority finds Appellants' individual attack on Arling improper because the Board "rejected the '146 application based on the combined teachings of Arling and Nakajima," the Board failed to engage in a motivation to combine analysis. Indeed, when asked at oral argument to identify the Board's analysis with respect to any motivation to combine Arling and Nakajima, counsel

for the government was unable to do so. *See* Oral Arg. at 16:19–42.

It is well established that "[t]he agency tribunal must make findings of relevant facts, and present its reasoning in sufficient detail that the court may conduct meaningful review of the agency action." *In re Lee*, 277 F.3d 1338, 1346 (Fed. Cir. 2002) (vacating the Board's obviousness determination and remanding for the Board to "set forth the findings and explanations needed for 'reasoned decisionmaking'"). We have also explained that it is not enough to merely "summarize and reject arguments without explaining why the [Board] accepts the prevailing argument." *In re Nuvasive, Inc.*, 842 F.3d 1376, 1383–84 (Fed. Cir. 2016).

The government argues that the examiner found a motivation to combine and submits that Appellants did not contest that finding before the Board, thereby relieving the Board of any need to address it. Oral Arg. at 17:29–56.[2] But the examiner's only statement regarding a motivation to combine Arling and Nakajima was that "[o]ne would have been motivated to provide this functionality because it provides an established system of accessing information improving overall operability." J.A. 167. In its Decision on Appeal, the Board simply noted—without analysis—that

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[2] The majority also seems to believe that Appellants did not contest the examiner's motivation to combine finding in their appeal brief to the Board. Maj. Op. at 13. But the Board clearly understood that the combination of prior art references was at issue on appeal, it just failed to expressly address motivation to combine in is obviousness analysis. *Decision on Appeal*, 2017 Pat. App. LEXIS 5591, at *4–5 ("The issue presented by Appellants' arguments is whether the Examiner errs in finding the combination of Niwamoto, Arling, and Nakajima teaches or suggests" the "tag file limitation" recited in claim 1.).

"the Examiner relies on a combination of Arling and Nakajima" to teach the "tag file limitation." *Board Decision*, 2017 Pat. App. LEXIS 5591, at *9. The Board then addressed Arling and Nakajima separately, with no further mention of motivation to combine. *Id.* at *10–14.

As noted, in its rehearing decision, the Board stated that it "agreed with the Examiner that the *combination* of Arling and Nakashima taught the 'tag file' and its further limitations." *Rehearing Decision*, 2017 Pat. App. LEXIS 7780, at *3–4. Rather than articulate reasons why it agreed with the examiner's analysis, the remainder of the Board's discussion focuses exclusively on Arling and culminates in the Board's new inherency finding. *Id.* at *4–5. Given our case law, the Board's failure to clearly articulate any motivation to combine warrants remand. *See In re Van Os*, 844 F.3d 1359, 1361–62 (Fed. Cir. 2017) (vacating obviousness determination where the Board "did not explain why modifying" the prior art "would have been 'intuitive' or otherwise identify a motivation to combine").

Although the majority recognizes that the Board's decision lacks "a high degree of specificity or detail," it nevertheless concludes that it is "possible to discern the grounds for the Board's rejection." Maj. Op. at 14. I disagree. Where, as here, the Board's stated grounds for affirming the examiner's rejection are either wrong (as to Arling alone) or insufficient (as to any combination of references), I believe remand is required. As such, I respectfully dissent.