

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ARRIS INTERNATIONAL PLC, PACE LTD.,
PACE AMERICAS, LLC, PACE AMERICAS HOLDINGS, INC., and
PACE AMERICAS INVESTMENTS, LLC,
Petitioner,

v.

SONY CORPORATION,
Patent Owner.

Case IPR2016-00828
Patent 7,733,295 B2

Before JENNIFER S. BISK, BART A. GERSTENBLITH, and
CHARLES J. BOUDREAU, *Administrative Patent Judges*.

GERSTENBLITH, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
37 C.F.R. § 42.108

I. INTRODUCTION

A. *Background*

ARRIS International plc, Pace Ltd., Pace Americas, LLC, Pace Americas Holdings, Inc. and Pace Americas Investments, LLC (collectively, “Petitioner”) filed a Petition (Paper 2, “Pet.”) requesting institution of *inter partes* review of claim 2 of U.S. Patent No. 7,733,295 B2 (Ex. 1001, “the ’295 patent”). Sony Corporation (“Patent Owner”) filed a Preliminary Response (Paper 6, “Prelim. Resp.”).

Under 35 U.S.C. § 314(a), an *inter partes* review may be instituted only if “the information presented in the [P]etition . . . and any [Preliminary Response] . . . shows that there is a reasonable likelihood that the [P]etitioner would prevail with respect to at least 1 of the claims challenged in the [P]etition.” See 37 C.F.R. § 42.108(c).

For the reasons given below, on this record, Petitioner has not established a reasonable likelihood of prevailing with respect to at least one challenged claim of the ’295 patent. Accordingly, we *deny* the Petition and decline to institute an *inter partes* review of the ’295 patent.

B. *Related Proceedings*

The parties indicate that the ’295 patent is asserted against Petitioner in the United States District Court for the District of Delaware, in a case captioned *Sony Corp. v. Pace plc*, No. 1:15-cv-00288-SLR-SRF, filed April 1, 2015.¹ Pet. 2–3; Paper 5, 2. Petitioner also challenges other patents assigned to Patent Owner in IPR2016-00827, IPR2016-00834, and IPR2016-00835. Pet. 2 n.2; Paper 5, 2–3.

¹ Petitioner indicates that Pace plc no longer exists and was reorganized as Pace Ltd. Pet. 1.

C. Real Parties in Interest

The Petition identifies “ARRIS International plc, and its wholly-owned subsidiaries Pace Ltd., Pace Americas, LLC, Pace Americas Holdings, Inc., and Pace Americas Investments LLC” as the real parties in interest. Pet. 1. Patent Owner identifies “SONY CORPORATION” as the sole real party in interest. Paper 5, 2.

D. The References

Petitioner relies on the following references:

U.S. Patent No. 6,097,441, issued Aug. 1, 2000 (Ex. 1005, “Allport”);

U.S. Patent No. 5,926,230, issued July 20, 1999 (Ex. 1006, “Niiijima”);

U.S. Patent No. 4,523,295, issued June 11, 1985 (Ex. 1007, “Zato”);

U.S. Patent No. 6,084,643, issued July 4, 2000 (Ex. 1008, “Kishtaka”);

U.S. Patent No. 6,263,503 B1, issued July 17, 2001 (Ex. 1009, “Margulis”);

U.S. Patent No. 6,496,122 B2, issued Dec. 17, 2002 (Ex. 1010, “Sampsell”);

European Patent No. EP 0 697 789 B1, issued Mar. 29, 2000 (Ex. 1013, “Hanaya”);

U.S. Patent No. 6,169,568 B1, issued Jan. 2, 2001 (Ex. 1022, “Shigetomi”); and

U.S. Patent No. 6,741,841 B1, issued May 25, 2004 (Ex. 1023, “Mitchell”).

E. The Asserted Grounds of Unpatentability

Petitioner challenges the patentability of claim 2 of the '295 patent on the following grounds:

References	Basis ²
Allport and Nijima	§ 103(a)
Margulis and Zato	§ 103(a)
Sampsell and Kishtaka	§ 103(a)
Shigetomi, Mitchell, and Hanaya	§ 103(a)

Petitioner supports its challenge with a Declaration by Dr. Samuel H. Russ, executed on March 31, 2016 (Ex. 1003, “the Russ Declaration”). Patent Owner supports its arguments in its Preliminary Response with a Declaration by Bruce McNair, dated July 11, 2016 (Ex. 2002).

F. The '295 Patent

The '295 patent is directed to “[a] bi-directional communication system comprising a base apparatus and a display apparatus.” Ex. 1001, at [57]. Figure 1 of the '295 patent is shown below:

² Petitioner identifies “35 U.S.C. §§ 102 and 103” in its statement of the relief requested (*see* Pet. 4), but in the specific grounds identified in its chart (*id.*) and the discussion of each ground in the Petition (*id.* at 14–60), Petitioner relies solely upon obviousness under § 103. Accordingly, we construe the Petition as relying solely upon § 103 as the statutory basis for each asserted ground of unpatentability.

FIG.1

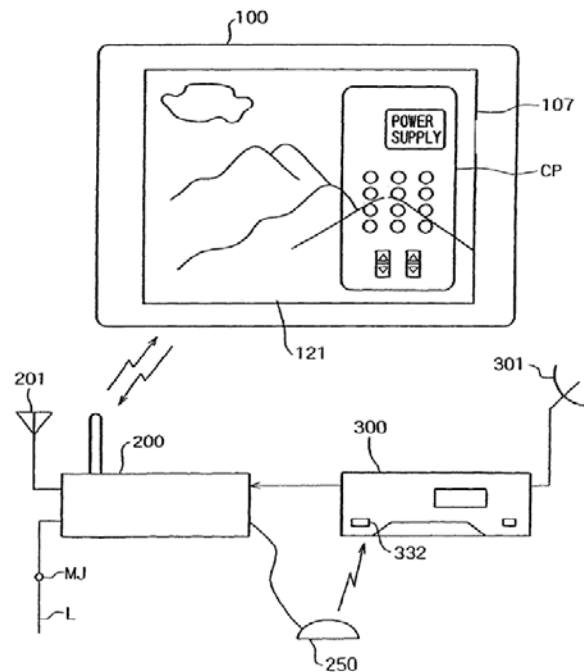


Figure 1 of the '295 patent “is a system diagram showing a bi-directional communication system to which the present invention is applied.” *Id.* at 4:7–8. “The bi-directional communication system uses a bi-directional communication method and includes a display apparatus 100, a base apparatus (base station) 200, and a set-top box 300, serving as an exemplary external input apparatus.” *Id.* at 4:41–46.

Display apparatus 100 includes a liquid crystal display “LCD 107.” *Id.* at 4:47–50. The display apparatus communicates with the base apparatus via radio communication and, thus, does not require a physical connection to the base apparatus. *Id.* at 4:50–53. For example, the display apparatus receives an information signal from the base apparatus and transmits a control signal to the base apparatus. *Id.* at 4:53–55.

The '295 patent explains the following regarding the base apparatus:

The base apparatus 200 has an antenna 201 and a tuner for receiving and selecting analog television broadcast signals. The base apparatus 200 further includes a modem and connection termination (modulator jack) MJ for connecting to a telephone line L. Thus, the base apparatus can be connected to a telephone network or the Internet.

The base apparatus 200 further has one or more external input terminals so that various external input apparatus, such as a video tape recorder (VTR), a set-top box, an integrated receiver decoder and/or a digital video disk (DVD) apparatus, can be connected to the base apparatus 200. In the arrangement shown in FIG. 1, the set-top box 300 is an external input apparatus connected through the external input terminal to the base apparatus 200.

Id. at 4:56–5:3.

The '295 patent explains the following regarding the display apparatus:

The display-apparatus 100 receives and demodulates the transmission signal from the base apparatus 200, extracts a video signal from the demodulated transmission signal and displays the video signal on the LCD 107. Further, the display apparatus 100 extracts an audio signal from the demodulated transmission signal and outputs the audio signal to a speaker (not shown).

The display apparatus 100 can display, on the LCD 107 thereof, the image of a control panel CP containing operating information and capable of accepting an operation input for controlling, for example, the set-top box 300. As shown in FIG. 1, a control panel image CP is provided for the set-top box 300 and includes a power supply on/off key, a numeric keypad for channel selection, channel up/down keys, and volume up/down keys.

The control panel CP is displayed in accordance with software executed by a control section of the display apparatus 100. As hereinafter described, a touch panel 121 is

adhered to the LCD 107 to accept operation inputs from a user through the displayed control panel image.

The touch panel 121 of the display apparatus 100 can detect a coordinate position at which the LCD 107 is touched by a finger of the user or the like. The control section of the display apparatus 100 determines the operation key displayed on the control panel image CP at the touched position, forms an operation signal corresponding to the operation key, and wirelessly transmits the operation signal to the base apparatus 200.

Id. at 5:10–38.

According to the '295 patent, remote control signal transmitter 250, which is connected to base apparatus 200, “forms a remote control signal in response to an operation signal from the display apparatus 100 and transmits the remote control signal to the set-top box 300.” *Id.* at 5:39–45. Set-top box 300 has a remote control signal reception section 332 for receiving infrared remote control signals, which allows the set-top box to receive a remote control signal from remote control signal transmitter 250 and perform operations in accordance with the received remote control signal.

Id. at 5:46–52.

Accordingly, the user can perform set-top box operations by using the control panel CP displayed on the LCD 107 of the display apparatus 100 and the touch panel 121. In this manner, the display apparatus 100 and the base apparatus 200 communicate bi-directionally, as do the base apparatus 200 and the set-top box 300

Id. at 5:55–61.

Figure 3 of the '295 patent is shown below:

FIG. 3

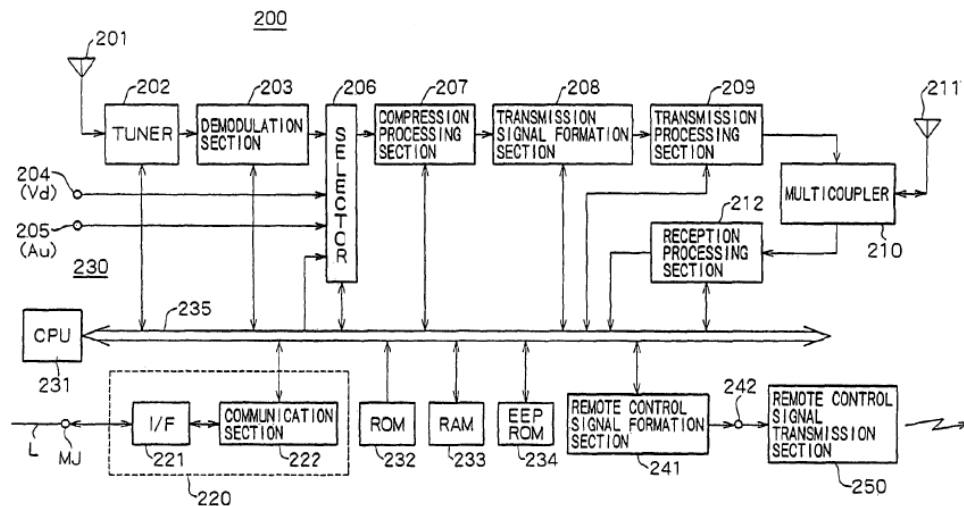


Figure 3 of the '295 patent “is a block diagram showing a base apparatus to which the present invention is applied.” *Id.* at 4:11–12. The base apparatus is controlled by control section 230, which “may be a micro-computer composed of a CPU 231, a [read only memory] ROM 232, a [random access memory] RAM 233 and an [electrically erasable programmable read only memory] EEPROM 234 connected to one another by a CPU bus 235.” *Id.* at 10:5–10. The '295 patent explains:

The EEPROM 234 is a nonvolatile memory and maintains its stored information even if the power supply is disconnected. Thus, for example, the EEPROM 234 is used to realize a last channel memory function of storing the last broadcast channel received prior to tuning [sic] the power off, so that when power is turned on again the previous channel is selected.

Id. at 10:14–20.

G. Challenged Claim

Claim 2 is the sole claim challenged in this proceeding and is reproduced below:

2. A base apparatus being connected to receive a television signal or Internet data supplied thereto and to transmit to a physically separate and remotely located display device an information signal representing said television signal or Internet data, said base apparatus comprising:

- a signal reception unit for receiving an operation signal transmitted from said display apparatus and representing user-selected operations performable at said base apparatus;

- a selection unit responsive to said received operation signal to select said television signal or said Internet data to produce said information signal;

- a transmission unit to transmit said information signal to said display device;

- a communication unit for transmitting user-generated information received from said display device to a communication network; and

- a nonvolatile memory for storing identifying information that identifies at least the television signal received immediately prior to a power interruption to supply to said display device the television signal identified by said stored identifying information upon resumption of said power.

Id. at 18:63–19:18.

II. CLAIM CONSTRUCTION

Although Petitioner and Patent Owner present proposed constructions for several claim terms, no terms require express construction for purposes of this Decision.

III. ANALYSIS

A. *Level of Ordinary Skill in the Art*

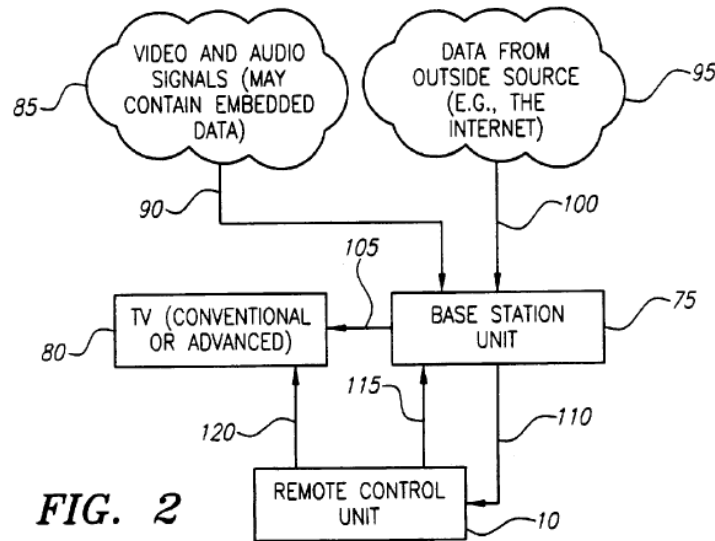
With regard to the level of ordinary skill in the art, we determine that no express finding is necessary, on this record, and that the level of ordinary skill in the art is reflected by the prior art of record. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001); *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995); *In re Oelrich*, 579 F.2d 86, 91 (CCPA 1978).

B. *Obviousness over Allport and Niijima*

Petitioner asserts that a combination of the teachings of Allport and Niijima would have rendered the subject matter of claim 2 of the '295 patent obvious to one of ordinary skill in the art at the time of the invention. Pet. 19–26. The Petition includes discussion and a claim chart identifying where Allport and Niijima allegedly teach or suggest the elements of each challenged claim. *Id.*

1. *Allport*

Allport is directed to systems and methods “for using two or more cooperating but physically independent displays for enhanced viewing of data streams, where the viewing on one display does not interfere with the viewing on the other displays.” Ex. 1005, at [57]. Allport’s Figure 2 is shown below:



Allport's Figure 2 "is a system diagram of a preferred embodiment of the present invention, showing the channels of communication between the various system components." *Id.* at 5:46–48. Allport explains that "FIG. 2 shows the base station 75 as a physically separate component from the remote control 10, which is a preferred embodiment [V]arious signals (data streams) 85 from various sources enter the base station 75 as indicated by arrow 90." *Id.* at 9:19–21, 9:46–48. Allport teaches:

Communications from the remote control 10 to the base station 75 (as indicated by arrow 115) are also preferably by standard control [infrared] IR Typical commands from the remote control 10 to the base station 75 may be a request for a new channel to view on the display 15 (i.e., channel surfing), a request to swap displayed programs with the TV 80, a request to access new data from the internet or other outside data source, or any other request to the base station 75 for data streams.

Id. at 10:43–45, 10:49–54.

Additionally, Allport teaches:

An extremely useful feature is to have the data streams on the TV's display and on the remote control's display 15 swapped. In order for this to occur, the base station 75 that is providing a channel to the remote control 10 must tune to a new

channel (the one the TV is tuned to just prior to the swap), and the TV must tune to a new channel (the one the base station is tuned to just prior to the swap). Therefore, there needs to be a way for the system (e.g., as seen in FIG. 2) to know what channel the TV 80 is tuned to just prior to the swap, and what channel the base station 75 is tuned to just prior to the swap. A preferred method, though by no means the only method, is for both the base station 75 and the TV 80 to get the required information from the remote control 10. This will usually be possible because the remote control 10 is aware (i.e., may store in its memory) of the channel the TV is tuned to based on the fact that the remote control 10 will have sent the “change channel” IR command to the TV 80 in the first place. Similarly, the remote control 10 will be aware of the channel the base station 75 is tuned to based on the fact that the remote control 10 will have sent the “change channel” IR command to the base station 75 in the first place too. Thus, the remote control 10 may be programmed to send IR control commands to both the TV 80 and to the base station 75 with the push of a single button.

Id. at 10:66–11:22.

With respect to different types of memory, Allport explains that base station 75 includes memory 195, boot ROM for holding the system software, and memory 120, flash ROM for storing downloaded information such as IR command libraries of devices being controlled, or other information such as data related to the user’s CD collection. *Id.* at 14:26–30. Remote control 10 includes memory 325, boot ROM for holding the system software, and memory 340, flash ROM for storing downloaded information such as TV schedules, CD track data, and pre-loaded IR command libraries, etc. *Id.* at 15:37–40.

2. *Nijima*

Nijima is directed to “[a]n electrical program guide system and method by which a desired program can be selected rapidly with certainty,

intuitively and directly from among a large number of programs”

Ex. 1006, at [57]. Niijima teaches:

Data which are desired to be maintained even after disconnection of the power supply, for example, a reception program history of the tuner 21 for four weeks and the number of a channel (last channel) which has been received immediately before disconnection of the power supply are stored suitably into an EEPROM (Electrically Erasable Programmable Read Only Memory) 38. Then, for example, when the power source is connected subsequently, the same channel as the last channel is received again.

Id. at 15:57–65.

3. Discussion

Petitioner contends that Allport discloses most of the elements of claim 2, but relies upon Niijima with respect to what Petitioner refers to as “limitation 2(e)” — “a nonvolatile memory for storing identifying information that identifies at least the television signal received immediately prior to a power interruption to supply to said display device the television signal identified by said stored identifying information upon resumption of said power.” *Id.* at 17. Petitioner asserts that Allport discloses “flash ROM in its base station and that its ‘remote control 10 is aware [of] (i.e., may store in its memory)’ channel tuning information (*e.g.*, ‘the channel the TV is tuned to’).” *Id.* (quoting Ex. 1005, 14:26–37, 11:9–23, Fig. 3). Petitioner contends that one of ordinary skill in the art “would understand that flash ROM is a form of non-volatile memory.” *Id.* (citing Ex. 1003 ¶ 114; Ex. 1017, 2:45–58, 5:32–34; Ex. 1032, 4:36–37). Petitioner asserts that Niijima

explicitly discloses any elements of limitation 2(e) not disclosed by Allport, because Niijima discloses a non-volatile memory (EEPROM) that stores identifying information that identifies at

least the television signal (such as “last channel”) received immediately prior to a power interruption to supply to the display device the television signal identified by the stored identifying information upon resumption of power (“when the power source is connected subsequently, the same channel as the last channel is received again”).

Id. at 18 (citing Ex. 1006, 15:57–16:10).

Petitioner raises several points in arguing that one of ordinary skill in the art would have been motivated to combine the teachings of Niijima and Allport: (1) both are in the field of communications and network systems, using software to manage the systems, and process information signals such as television signals; (2) both address a need to view multiple channels on multiple displays; (3) one of ordinary skill in the art would understand that “preserving channel selection becomes more important the more channels are available to choose from, and that Niijima’s teaching of using non-volatile memory to preserve information would provide a solution for the problem of Allport’s complex streams”; (4) both recognize the need to store channel selection in memory and one of ordinary skill would understand that need becomes more important during a power interruption; (5) applying Niijima’s non-volatile memory teachings to Allport “would yield benefits including meeting the expectations the viewer had for the TV viewing experience (a paradigm that stretches back to the manual dial operated TV sets), recovering stored information quickly, and meeting user expectations with a cheap, simple, and effective solution; (6) applying Niijima’s teachings “merely combines known prior art elements that would be technically simple and would yield predictable results”; and (7) Allport and Niijima are in the same field of endeavor and address the same problem. *Id.* at 18–19 (citations omitted).

Patent Owner raises several arguments in response, including that “there would have been no motivation to modify Allport in view of Niijima because the remote-side system of Allport already solved the alleged problem of storing channel information in non-volatile memory, so that it could be recovered after a power disruption, in a systemically different way.” Prelim. Resp. 10 (citations omitted). Patent Owner contends that Niijima “discloses storing channel information in memory at a receiver.” *Id.* at 11. Patent Owner asserts that “[s]ince Allport’s remote-side arrangement . . . has its own non-volatile memory and even its own power source, the remote control would retain channel information in the event of a power outage at the base station.” *Id.* at 10–11 (citing Ex. 1005, Fig. 4). Patent Owner argues:

[I]f anything, Allport would simply re-transmit the channel information stored at the remote control to the base station after the base station regains power. There would have been no motivation to introduce a systemically different receiver-side solution to solve the same problem addressed by Allport’s remote-side system, as none exists, and it is not surprising that petitioners fail to even allege one.

Id. at 11 (citing Ex. 2002 ¶¶ 19–29).

Claim 2 recites five structural elements of the claimed base apparatus, including a nonvolatile memory. Petitioner focuses on Allport’s base station for most of the elements of claim 2, but turns to Allport’s remote control when discussing “limitation 2(e).” Pet. 15–17. Petitioner recognizes that Allport’s remote control 10 stores channel tuning information, but that Allport does not disclose that its base station also stores channel tuning information, as required by claim 2. *See id.* at 17. In discussing the alleged reasons why one of ordinary skill in the art would have modified Allport,

Petitioner fails to acknowledge that Allport already provides a different solution to the problem identified by Petitioner—of channel retention in the event of a power interruption—by storing the channel information in the remote control. In other words, Allport already addresses the alleged problem/need that Petitioner asserts would provide a motivating reason to seek a solution, and Allport also provides a workable solution by maintaining the channel information in the memory of the remote control. Petitioner does not allege any deficiency of Allport’s remote control-side arrangement such that modifying it as proposed would result in some type of benefit.

Although not mentioned in the Petition,³ Petitioner’s declarant, Dr. Russ, provides the following testimony:

the non-volatile memory feature would have been incorporated into the base station and not a remote unit, because it is the base station that manages the tuning and selection features; therefore it would have been simpler to incorporate the non-volatile memory into the base station. By implementing the non-volatile memory in the base station, the system can respond quickly to power failure. For at least these reasons, the non-volatile memory feature would have been incorporated into the base station and not a remote unit.

Ex. 1003 ¶ 121.

Assuming that when Dr. Russ states “the non-volatile memory *feature*” (emphasis added), the feature to which he refers is the storing of the

³ The Petition includes two citations that encompass paragraph 121 of the Russ Declaration, but neither is accompanied by any argument that the non-volatile memory would have been incorporated in a base station instead of in Allport’s remote control. Pet. 17 (citing Ex. 1003 ¶¶ 112–123), 19 (citing Ex. 1003 ¶¶ 120–121).

last channel, his testimony is the only evidence as to why one of ordinary skill in the art allegedly would have incorporated the feature in the base station and not the remote control. In short, he opines that it would be “simpler” because the base station manages the tuning and selection features, and could therefore respond quickly. *See id.* One significant problem we have with Dr. Russ’s testimony is that he—like Petitioner—fails to acknowledge that Allport’s remote control already stores channel tuning information. In other words, if we were starting from a blank slate (i.e., if Allport had not specified where channel tuning information is stored), Dr. Russ’s testimony might hold more weight—although we would still have the potential problem, identified below, regarding exactly why such incorporation would be simpler—but, as noted above, we are not starting from a blank slate because Allport already stores channel information in its remote control. Thus, we give Dr. Russ’s testimony on this point very little weight.

Additionally, as noted above, Dr. Russ fails to explain *why* storing the last channel would have been simpler in the device responsible for the tuning and selection features (i.e., Allport’s base station) than in Allport’s remote control. In other words, a user would presumably enter the channel information on the remote control and it too would have a direct role in channel selection. Thus, even if we were starting from a blank slate, Dr. Russ’s statement that it would be simpler to incorporate said feature in Allport’s base station is unsupported by sufficient explanation or evidence.

In light of our discussion above, we agree with Patent Owner that Petitioner’s argument fails to explain why one of ordinary skill in the art would have modified Allport’s remote-side channel storing system in light

of Niijima's receiver-side channel storing system. Accordingly, we determine that, based on the record before us, Petitioner has not shown a reasonable likelihood that it would prevail in establishing the unpatentability of claim 2 as obvious over the combination of Allport and Niijima.

C. Obviousness over Margulis and Zato

Petitioner asserts that a combination of the teachings of Margulis and Zato would have rendered the subject matter of claim 2 of the '295 patent obvious to one of ordinary skill in the art at the time of the invention. Pet. 26–38. The Petition includes discussion and a claim chart identifying where Margulis and Zato allegedly teach or suggest the elements of each challenged claim. *Id.*

1. Margulis

Margulis is directed to “enhanced television systems, . . . more particularly to a method for effectively implementing a wireless television system.” Ex. 1009, 1:8–10. Figure 1 of Margulis is shown below:

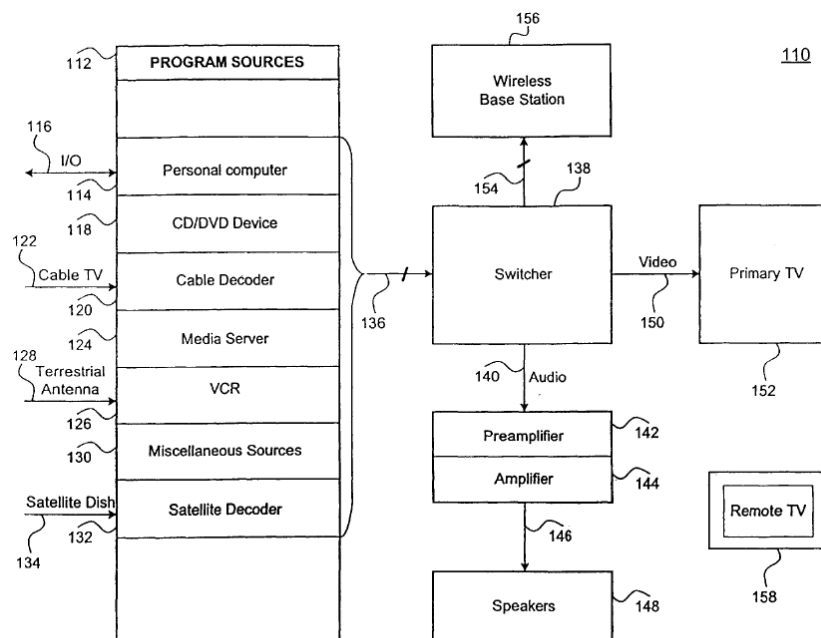


FIG. 1

Margulis's Figure 1 "is a block diagram of a basic wireless television system, in accordance with one embodiment" disclosed. *Id.* at 3:19–21.

Margulis explains the following regarding Figure 1:

switcher 138 preferably receives individual program signals from each of the program sources 112 via path 136. Switcher 138 then preferably selects one or more of the program sources 112 as a switcher output program in response to control information typically provided by a viewer of system 110. Switcher 138 preferably provides video information from the switcher output program to primary TV 152 via path 150. Similarly, switcher 138 preferably provides audio information from the switcher output program to amplifier 144 through preamplifier 142 via path 140. Amplifier 144 then provides the amplified audio information to speakers 148 via path 146.

In accordance with the present invention, switcher 138 preferably also provides one or more program sources 112 to wireless base station 156 through path 154.

Id. at 4:56–5:3.

Margulis's Figure 5 is shown below:

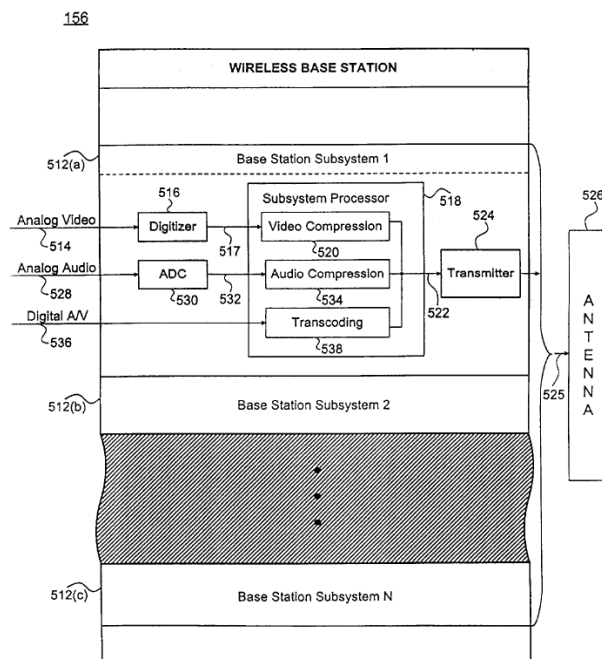


FIG. 5

Figure 5 of Margulis “is a block diagram of the wireless base station of FIG. 1, in accordance with one embodiment” disclosed. *Id.* at 3:31–33.

Margulis teaches that

wireless base station 156 preferably includes, but is not limited to, a base station subsystem 1 (512(a)) through a base station subsystem N (512(c)[l]), and an antenna 526. . . . [B]ase station subsystem 512(a) preferably receives various input signals that may include analog video on path 514, and digital audio/video (A/V) data on path 536.

. . .

[S]ubsystem processor 518 preferably receives various information from program sources 112 that may be encoded using an extensive variety of formats and configurations. Subsystem processor 518 then preferably processes and manipulates the received program sources 112 to advantageously generate processed program information in a particular format that is compatible for downstream use by transmitter 324 and remote TV 158.

Id. at 7:7–10, 7:28–31, 7:35–43.

Margulis’s Figure 6 is shown below:

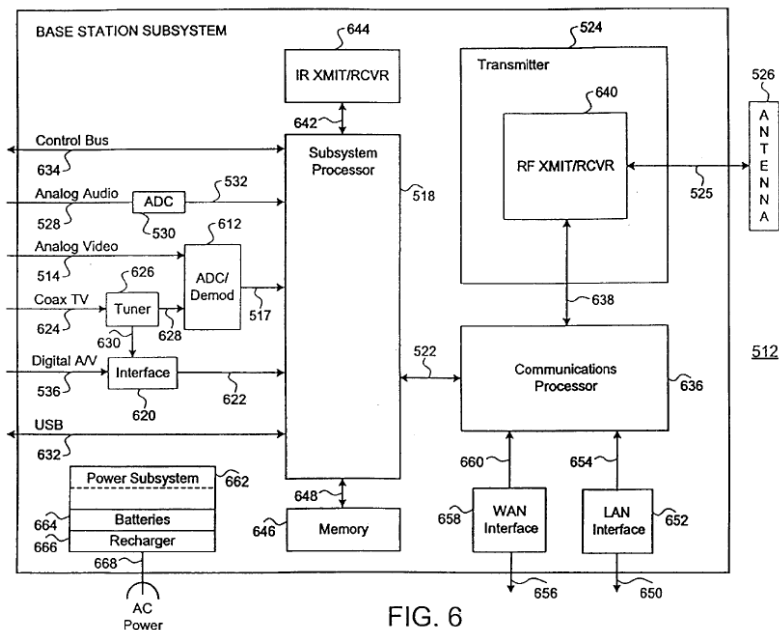


FIG. 6

Figure 6 of Margulis “is a block diagram of an exemplary base station subsystem, in accordance with one embodiment” disclosed. *Id.* at 3:34–36.

Margulis explains:

Subsystem processor 518 preferably may receive various selectable program signals from any appropriate source, including program sources 112 (FIG. 1).

...

In the FIG. 6 embodiment, subsystem processor 518 preferably combines processed video, processed audio, and processed data to thereby provide a processed stream comprising one or more selectable processed program sources 112 to communications processor 636 through path 522.

...

... Remote TV 158 or remote controller 310 may advantageously transmit wireless radio-frequency control information to subsystem processor 518.... In response, subsystem processor 518 may function as a master controller to utilize the received wireless radio-frequency control information for controlling various components and functionalities in wireless television system 110.

Id. at 9:14–17, 9:54–58, 10:43–51. Margulis further teaches that

Power subsystem 622 also preferably includes batteries 664 which may serve as a backup power source so that, even when main operating power is turned off, base station subsystem 512 may still monitor system control information to components of wireless television system 110, and thereby maintain current system status information in memory 646.

Id. at 11:10–16.

2. Zato

Zato is directed to power loss compensation for a programmable memory control system. Ex. 1007, at [54]. Zato teaches that “[t]he system includes a static random access memory (RAM) for periodically storing

microprocessor-generated timing information and an electrically erasable programmable ROM (EE-PROM) which is coupled to the static RAM for the temporary storage of this information in the event of a power outage.” *Id.* at [57]; *see id.* at 4:47–57. Zato explains that when system input power is restored, “the stored contents of the nonvolatile EEPROM are automatically retransferred back to the static RAM for use by the microprocessor permitting the resumption of system operation as previously programmed on a time-shifted basis where the time shift equals the duration of the power outage.” *Id.* at [57]; *see also id.* at 4:57–5:20.

3. Discussion

Petitioner relies upon Margulis as disclosing most of the elements of claim 2, including what Petitioner refers to as “limitation 2(b)” — “a selection unit responsive to said received operation signal to select said television signal or said Internet data to produce said information signal.” Pet. 27. Petitioner asserts that Margulis’s teaching of subsystem processor 518 meets the recited selection unit. *Id.* Petitioner states:

Margulis also discloses that the selection unit selects the television signal (*e.g.*, via “Coax TV interface 624”) or Internet data (*e.g.*, via “WAN interface 658”) and “subsystem processor 518 may function as a master controller . . . for controlling various components and functionalities in wireless television system 110”) to produce the information signal (“subsystem processor 518 . . . provide[s] a processed stream comprising one or more selectable processed program sources.”). *Id.* at 27–28 (quoting Ex. 1009, 10:43–57, 9:54–62, 10:23–39).

Patent Owner asserts that Margulis’s subsystem processor does not select between a television signal or Internet data; rather, “Margulis merely discloses that its subsystem processor receives information from program sources and then processes and manipulates the received information to

generate program information in a particular format.” Prelim. Resp. 13 (citing Ex. 1009, 7:36–44). Patent Owner contends that “[a]ny selecting between different sources in Margulis is done by [s]witch 138 (which is not part of the base station), as opposed to anything in the base station.”

Id. at 13–14. Patent Owner asserts that “there is no disclosure of Margulis’s base station switching from a television signal to Internet data, or vice versa.” *Id.* at 14.

We agree with Patent Owner that Margulis does not explicitly disclose that subsystem processor 518 “selects said television signal or said Internet data to produce said information signal,” as recited by claim 2. *See id.* at 13. In describing Figure 1, Margulis states: “Switcher 138 then preferably selects one or more of the program sources 112 as a switcher output program in response to control information typically provided by a viewer of the system 110.” Ex. 1009, 4:58–61. Margulis’s Figure 1 illustrates switcher 138 as a separate and distinct component from base station 156. Margulis, Fig. 1. Margulis’s Figures 5 and 6, the description of which Petitioner relies upon (*see* Pet. 27–28), specifically point back to base station 156 of Figure 1. *See* Ex. 1009, 7:5–7 (“Referring now to FIG. 5, a block diagram of the FIG. 1 wireless base station 156 is shown In the FIG. 5 embodiment, wireless base station 156 preferably includes, but is not limited to, a base station subsystem 1 (512(a)) through a base station subsystem N (512(c)[l])”); *id.* at 9:1–3 (“Referring now to FIG. 6, a block diagram of an exemplary base station subsystem 512 is shown”). In short, it appears that Margulis describes the elements of Figures 5 and 6 as though they are a part of the overall system shown in Figure 1. Margulis’s use of the same reference numeral for the base station—156—in

Figures 1 and 5 and same reference numeral for the base station subsystem—512—in Figures 5 and 6, support the same conclusion. See 37 C.F.R. § 1.84(p)(4) (“The same part of an invention appearing in more than one view of the drawing must always be designated by the same reference character, and the same reference character must never be used to designate different parts.”). Additionally, and notably, Petitioner does not argue that Figures 5 and 6 illustrate something other than additional details regarding the overall system shown in Figure 1. And, as discussed above, Petitioner’s citations to subsystem processor 518 do not state explicitly that subsystem processor 518 performs the functions attributed to switcher 138 or as required of the selection unit recited in claim 2 of the ’295 patent.

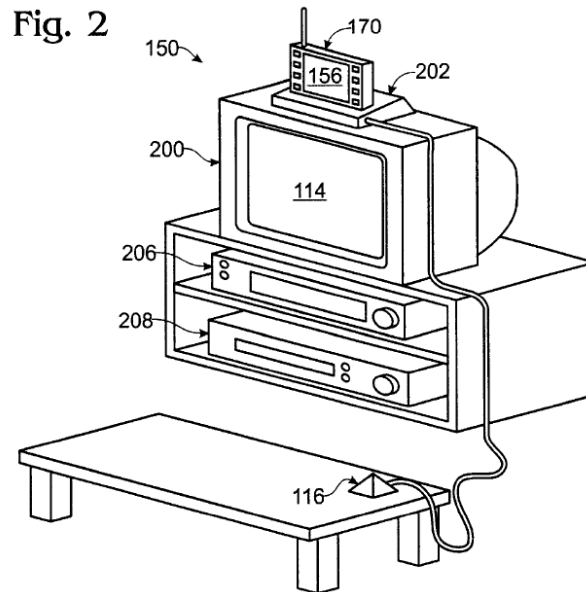
Accordingly, we determine that, based on the record before us, Petitioner has not shown a reasonable likelihood that it would prevail in establishing the unpatentability of claim 2 as obvious over the combination of Margulis and Zato.

D. Obviousness over Sampsell and Kishtaka

Petitioner asserts that a combination of the teachings of Sampsell and Kishtaka would have rendered the subject matter of claim 2 of the ’295 patent obvious to one of ordinary skill in the art at the time of the invention. Pet. 38–49. The Petition includes discussion and a claim chart identifying where Sampsell and Kishtaka allegedly teach or suggest the elements of each challenged claim. *Id.*

1. *Sampsell*

Sampsell is directed to “a remote control system for use with an image display device.” Ex. 1010, 2:17–28. Figure 2 of Sampsell is shown below:



Sampsell’s Figure 2 “is a perspective view of an image display system in accordance with the present” disclosure. *Id.* at 3:9–10. Sampsell explains:

In the illustrated embodiment, a television 200 is an image source with the display 114 embodied as a television screen. The external processing circuitry 110 is the standard processing circuitry of the television 200. The remote control system 150 includes the remote control 170 and a docking station 202 in which it rests. Image screen 156 resides on the remote control 170. The image display system 150 shown in FIG. 2 comprises a separate docking station 202 and a conventional television 200. In this arrangement, the controller 106, transmitter 108, control receiver 112 and other circuitry of the image processor 172 reside in the docking station 202. The receiver 152, the processing circuitry 154, the image screen 156, the speaker 158, the VRC controller 160, the transmitter 164 and the other circuitry reside in the remote control 170.

Id. at 7:27–43.

Sampsell's Figures 11 and 12 are shown below:

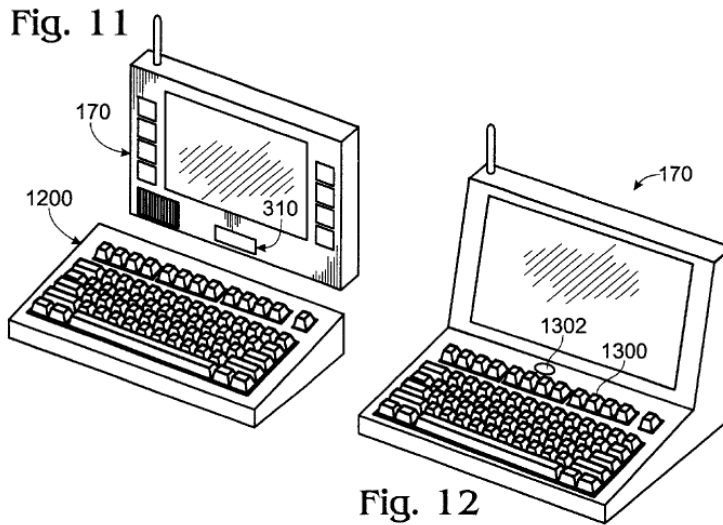


Figure 11 of Sampsell “is a perspective view of a keyboard for use with a computer television device and a video remote control.” *Id.* at 3:34–36.

Figure 12 of Sampsell “is a perspective front view of an alternate embodiment of a video remote control adapted for use with an [sic] computer television device.” *Id.* at 3:37–40. Sampsell explains the following with respect to Figure 11:

IR signals from the keyboard 1200 to the computer television may emanate from an IR transmitter located on the keyboard. The remote control 170 is positioned in front of the keyboard 1200 such that the IR sensor 310 of the remote control 170 receives the IR signals emanating from the IR transmitter of the keyboard 1200. The remote control 170 then transmits these signals to the docking station 202 by RF communication. The docking station 202 sends the appropriate IR signals in the appropriate format, e.g. Web TV, to the computer television via the IR transmitter 116.

Id. at 12:54–63. Sampsell explains the following with respect to Figure 12:

FIG. 12 shows an alternate embodiment of the present invention where the remote control 170 is integrated with a computer monitor or computer television such as a WEB-TV™ device. The remote control 170 has a keyboard 1300 with a

tracking ball 1302 to allow a user to input commands and instructions to work on-line with standard browsers, web pages and on-line services. . . . [R]emote control 170 receives display information and exchanges command and information signals via RF communication with a docking station 202, as shown in FIGS. 8 and 9.

Id. at 13:12–22.

2. *Kishtaka*

Kishtaka is directed to “receiving equipment and a method of using the same, whereby a channel switching to a desired channel can be done swiftly.” Ex. 1008, 1:7–9. Kishtaka states:

In an EEPROM (Electrically Erasable Programmable Read Only Memory) 38 are stored data that are desired to be maintained after the power is turned off (for example, reception history of the tuner 21 for four weeks, channel number having been received directly before any operation is done by a user (last channel)). The data stored in the EEPROM 38 are utilized, for example, in such a process that the power is on and the same channel as the last channel is automatically received again. When the last channel is not stored, a channel stored in the ROM 37 as a default is received.

Id. at 4:57–67.

3. *Discussion*

Petitioner relies on Sampsell as disclosing most of the elements of claim 2, including “limitation 2(d)” — “a communication unit for transmitting user-generated information received from said display device to a communication network.” Pet. 40. Petitioner contends that Sampsell “discloses two options for a communication unit: 1) keyboard 1200 . . . or 2) keyboard 1300.” *Id.* (citing Ex. 1010, 12:41–53, 13:12–18). Petitioner asserts that “[e]ither of these communication units transmits user-generated information (*e.g.*, website requests) received from the display device (remote

control 170) to a communication network (*e.g.*, a computer network).” *Id.* (citing Ex. 1003 ¶ 184). Additionally, Petitioner relies upon Sampsell’s docking station 202 as meeting the claimed base apparatus. *Id.* at 38 (“Sampsell discloses a base apparatus (docking station) . . .”).

Patent Owner asserts that Petitioner relies upon Sampsell’s docking station as disclosing the claimed base apparatus but, because Sampsell’s keyboards are not part of the docking station, they cannot disclose the “communication unit” of the claimed base apparatus. Prelim. Resp. 19–22. Additionally, Patent Owner contends that claim 2 recites that the communication unit transmits user-generated information *received from* said display device to a communication network, but Sampsell’s keyboards receive user-generated information from a user (*e.g.*, a user typing on the keyboard), not from a display device. *Id.* at 22.

We agree with Patent Owner. First, Sampsell’s keyboard 1200 and keyboard 1300 are not part of the docking station. Second, Sampsell teaches that each keyboard transmits user-generated information *from a user* either to remote control 170 via IR sensor 310, which then transmits the information to the docking station via RF communication, in the embodiment of keyboard 1200 (Ex. 1010, 12:56–61), or directly to the docking station, in the embodiment of integrated keyboard 1300 (*id.* at 13:18–22). Neither embodiment, however, transmits user-generated information *received from said display device* to a communication network, as recited by claim 2.

Accordingly, we determine that, based on the record before us, Petitioner has not shown a reasonable likelihood that it would prevail in

establishing the unpatentability of claim 2 as obvious over the combination of Sampsell and Kishtaka.

E. Obviousness over Shigetomi, Mitchell, and Hanaya

Petitioner asserts that a combination of the teachings of Shigetomi, Mitchell, and Hanaya would have rendered the subject matter of claim 2 of the '295 patent obvious to one of ordinary skill in the art at the time of the invention. Pet. 49–60. The Petition includes discussion and a claim chart identifying where Shigetomi, Mitchell, and Hanaya allegedly teach or suggest the elements of each challenged claim. *Id.* Patent Owner argues that Shigetomi cannot be relied upon to show that claim 2 would have been obvious under § 103(a) because it is precluded by 35 U.S.C. § 103(c)(1). Prelim. Resp. 24–25.

We agree with Patent Owner. Section 103(c)(1) of Title 35 of the United States Code provides:

Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person.

35 U.S.C. § 103(c)(1) (2004).⁴

Petitioner asserts that Shigetomi qualifies as prior art under § 102(e). Pet. 4–5. Petitioner does not argue that Shigetomi qualifies as prior art under either § 102(a) or § 102(b). *See id.* Tetsu Shigetomi is the named

⁴ Section 103 was amended by the Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, § 4(c), 125 Stat. 284 (2001), but we apply the pre-AIA version of the statute because the '295 patent has an effective filing date before September 12, 2012, the effective date of the AIA amendment.

inventor identified on the face of Shigetomi. Ex. 1022, at [75]. The '295 patent identifies Mami Uchida, Ayumi Mizobuchi, and Kasumi Takeda as the named inventors. Ex. 1001, at [75]. Shigetomi and the '295 patent identify Sony Corporation as the assignee. Ex. 1001, at [73]; Ex. 1022, at [73]. As Patent Owner explains, the '295 patent claims priority to a Japanese patent application filed July 17, 2000, which was subject to an obligation of assignment to Sony Corporation at that time. Prelim. Resp. 26–27 (citing Ex. 1001; Ex. 2003 (Deed of Assignment of Japanese Patent Application No. 2000-215359)). The patent application that issued as Shigetomi was filed December 10, 1996, and was pending before the United States Patent and Trademark Office as of July 17, 2000. *Id.* at 27 (citing Ex. 1022). Shigetomi was also subject to an obligation of assignment to Sony Corporation as of July 17, 2000. *Id.* (citing Ex. 2004 (Assignment of U.S. Patent Application No. 08/762,724); Ex. 2005 (Deed of Assignment of Japanese Patent Application No. 07-347238)). Thus, because Shigetomi and the '295 patent were subject to an obligation of assignment to the same person⁵ at the time the '295 patent was filed, Shigetomi falls within § 103(c)(1) and “shall not preclude patentability” of claim 2 of the '295 patent.

Accordingly, we determine that, based on the record before us, Petitioner has not shown a reasonable likelihood that it would prevail in

⁵ “[P]erson” as used in § 103(c)(1) refers to “person(s) or organization(s)/ business entity(ies).” Manual of Patent Examining Procedure § 706.02(L)(2) (9th Ed., Nov. 2015) (“DEFINITION OF COMMON OWNERSHIP”).

establishing the unpatentability of claim 2 as obvious over the combination of Shigetomi, Mitchell, and Hanaya.

IV. CONCLUSION

For the foregoing reasons, on this record, Petitioner has not established a reasonable likelihood of prevailing with respect to claim 2 of the '295 patent.

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that the Petition is *denied* as to the challenged claims of the '295 patent; and

FURTHER ORDERED that no *inter partes* review is instituted.

IPR2016-00828
Patent 7,733,295 B2

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