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Paper 11
Date: January 25, 2024

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

IMIRACLE HK LIMITED,
Petitioner,

v.

VPR BRANDS, LP,
Patent Owner.

IPR2023-01255
Patent 8,205,622 B2

Before JO-ANNE M. KOKOSKI, JULIA HEANEY, and JANE E. INGLESE, *Administrative Patent Judges.*

KOKOSKI, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

iMiracle HK Limited ("Petitioner") filed a Petition to institute an *inter partes* review of claims 12–15, 17, and 18 of U.S. Patent No. 8,205,622 B2 ("the '622 patent," Ex. 1001). Paper 2 ("Pet."). VPR Brands, LP ("Patent Owner") filed a Preliminary Response. Paper 9 ("Prelim. Resp."). In the Preliminary Response, Patent Owner indicates that it filed a Statutory Disclaimer pursuant to 35 U.S.C. § 253 and 37 C.F.R. § 1.321(a), disclaiming claims 12, 17, and 18 of the '622 patent, and, accordingly, claims 13–15 ("the challenged claims") are the only claims at issue. Prelim. Resp. 1 (citing Ex. 2002).

Institution of an *inter partes* review is authorized by statute when "the information presented in the petition . . . and any response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." 35 U.S.C. § 314 (2018); *see also* 37 C.F.R. § 42.4 (2023). For the reasons discussed below, we deny the Petition and do not institute an *inter partes* review.

A. Patent Owner's Disclaimer of Claims 12, 17, and 18

As indicated above, Patent Owner filed a statutory disclaimer of claims 12, 17, and 18 of the '622 patent. *See* Ex. 2002. In view of Patent Owner's statutory disclaimer, we treat claims 12, 17, and 18 as having never been part of the '622 patent. *See Vectra Fitness, Inc. v. TNWK Corp.*, 162 F.3d 1379, 1383 (Fed. Cir. 1998) ("This court has interpreted the term 'considered as part of the original patent' in [35 U.S.C.] § 253 to mean that the patent is treated as though the disclaimed claims never existed."). Because *inter partes* review cannot be instituted based on disclaimed claims, we do not consider claims 12, 17, and 18 to be within the scope of this proceeding. 37 C.F.R. § 42.107(e) ("No *inter partes* review will be

instituted based on disclaimed claims."); *General Elec. Co. v. United Techs. Corp.*, IPR2017-00491, Paper 9 (PTAB July 6, 2017) (precedential) (denying institution in view of a statutory disclaimer of all the challenged claims). Thus, we confine our analysis in this Decision to claims 13–15, the challenged claims that have not been disclaimed.

B. Real Parties-in-Interest

Petitioner identifies iMiracle HK Limited, Shenzhen iMiracle Technology Co. Ltd., Shenzhen Weiboli Technology Co. Ltd., and Heaven Gifts International Limited Ltd. as the real parties-in-interest. Pet. 1. Patent Owner identifies itself as the real party-in-interest. Paper 5, 1 (Mandatory Notice).

C. Related Matters

Petitioner indicates that the '622 patent is at issue in *VPR Brands, L.P. v. iMiracle HK Limited*, No. 9:22-cv-81977 (S.D. Fl.). Pet. 2. Both parties indicate that the '622 patent is also at issue in *VPR Brands, L.P. v. Shenzhen Weiboli Tech. Co. Ltd.*, No. 9:22-cv-81576-AMC (S.D. Fl). *Id.*; Paper 5, 1–2. Petitioner also identifies several additional cases pending in the Southern District of Florida as related matters. Pet. 2.

D. The '622 Patent

The '622 patent relates to an electronic cigarette that includes an electronic inhaler and an electronic atomizer, each of which "may have a metal or plastic tube, and the two tubes may have an identical or similar diameter." Ex. 1001, 2:25–30. The electronic inhaler includes an electric power source that "supplies electric power to the electronic inhaler and electronic atomizer and ensures that both work together like a cigarette." *Id.* at code (57). The electronic inhaler also includes an electric airflow sensor to detect air movement generated by a user's puffing action, and a single

chip micyoco that controls the atomization process. *Id*. The electronic atomizer includes an electric connector, electric heating wire, a liquid container, and an atomizer cap with an air-puffing hole. *Id*. The electronic inhaler and the electronic atomizer are connected by "connectors on both parts to form an entire electronic cigarette." *Id*. at 2:48–50.

The '622 patent explains that "[o]ne of the new technologies that may be used" with the described electronic cigarette is "an electric airflow sensor instead of a mechanical device in detecting an airflow generated by the user's puffing and creating a signal for the microprocessor to activate the electric circuit." *Id*. at 3:23–28. According to the '622 patent, "[t]his new technology provides a solution to the problems of the current inhaling technology by eliminating aging and short-life drawbacks of the current mechanical device technology," and "makes the puffing of users on the cigarette much easier and smoother." *Id*. at 3:34–38. Electronic sensors are also "more sensitive to turning on and off the vaporizing process than the conventional mechanical system," and "can last for five years, many times longer than the mechanical device." *Id*. at 3:38–42.

The '622 patent teaches that, "[w]hen the user puffs on the electronic cigarette through the air-puffing hole on the first end of the atomizer, the electronic sensor detects an airflow and converts it to a signal, which then wakes up the single chip micyoco to record the signal." Ex. 1001, 2:51–54. The single chip micyoco, guided by its embedded software instructions, "turn[s] on the electric power source to supply an electricity current with a predetermined time and length." *Id*. at 2:55–57. The magnitude of the electric current from the electric power source "depends on the magnitude of the signal detected from the airflow proportional to the strength of the user's puffing action," which "controls the temperature and the heat generated" in a

process that "closely mimics the process of cigarette smoking." *Id*. at 4:26–32. The electric current then "preferably flows through the electric heat wire inside the atomizer tube, which then heats up the heat equalizer with absorbed liquid from the liquid-container" and "converts the liquid into a form of vapor mist" that is "drawn into the mouth of the user." *Id*. at 2:57–62.

E. Illustrative Claim

Petitioner challenges claims 13–15 of the '622 patent. Claim 13, the only independent challenged claim, is illustrative of the claimed subject matter and reproduced below.

> 13. An electronic cigarette comprising a tubular electronic inhaler and a tubular electronic atomizer, wherein the electronic inhaler includes an electric power source that provides an electric current to the electronic atomizer, the electronic cigarette further comprising an electric airflow sensor that is used to turn on and off the electric power source by way of detecting an airflow and sending a signal to a Single Chip Micyoco, wherein the Single Chip Micyoco receives the signal from the electric airflow sensor, instructs the electric power source to send an electric current to the electronic atomizer, and a time period and a magnitude of the electric current.

Ex. 1001, 7:38–8:3.

F. Asserted Grounds

Petitioner asserts that claims 13–15 would have been unpatentable based on the following grounds:

Claims Challenged	35 U.S.C. §	Reference(s)/Basis
13–15	102/103[1]	Tao[2]
13–15	103	Yang,[3] Tao
13, 14	102/103	Wang411[4]

Pet. 3. Petitioner relies on the Declaration of Dr. Robert H. Sturges (Ex. 1004) in support of its contentions.

II. ANALYSIS

A. Level of Ordinary Skill in the Art

Petitioner contends that a person of ordinary skill in the art ("POSITA") would have had "a Bachelor's degree in electrical engineering, mechanical engineering, or biomedical engineering or related fields, along with at least five years of experience designing electromechanical devices, including those involving circuits, electroacoustics, fluid mechanics and heat transfer." Pet. 7 (citing Ex. 1004 ¶¶ 45–47). At this stage of the proceeding, Patent Owner neither responds to Petitioner's proposed definition, nor provides a definition of its own. *See generally*, Prelim. Resp. Petitioner's undisputed proposed definition appears to be consistent with the cited prior art and the disclosure of the '622 patent, and we adopt it for purposes of this Decision. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001)

[1] The Leahy-Smith America Invents Act ("AIA"), Pub. L. No. 112–29, 125 Stat. 284 (2011), revised 35 U.S.C. §§ 102 and 103 effective March 16, 2013. Because the '622 patent has an effective filing date before March 16, 2013 (Ex. 1001, codes (22), (30)), we refer to the pre-AIA version of Sections 102 and 103.
[2] Tao, CN 201051862Y, published April 30, 2008. (Ex. 1006 (English translation); Ex. 1007 (translation certificate); Ex. 1008 (original Chinese)).
[3] Yang, CN 201029436Y, published March 5, 2008 (Ex. 1009 (English translation); Ex. 1010 (original Chinese); Ex. 1011 (translation certificate)).
[4] Wang, WO 2008/139411 A2, published Nov. 20, 2008 ("Wang411," Ex. 1012).

(explaining that specific findings regarding ordinary skill level are not required "where the prior art itself reflects an appropriate level and a need for testimony is not shown" (quoting *Litton Indus. Prods., Inc. v. Solid State Sys. Corp.*, 755 F.2d 158, 163 (Fed. Cir. 1985)).

B. Claim Construction

We construe each claim "in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent." 37 C.F.R. § 42.100(b). Under this standard, claim terms are generally given their plain and ordinary meaning as would have been understood by a person of ordinary skill in the art at the time of the invention and in the context of the entire patent disclosure. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc). Only those terms in controversy need to be construed, and only to the extent necessary to resolve the controversy. *Realtime Data LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019).

Petitioner contends that the claim terms "electric airflow sensor," "time period and a magnitude of the electric current," and "diaphragm microphone" should be construed in accordance with constructions stipulated to by Patent Owner in litigation in the District of Arizona ("stipulated constructions"). Pet. 8 (citing Ex. 1005; Ex. 1004 ¶¶ 49–51). Patent Owner does not challenge Petitioner's proposed claim constructions, and further contends that the terms "Single Chip Micyoco" and "instructs" should also be construed consistent with the stipulated constructions. Prelim. Resp. 6. Based on the parties' apparent agreement, and considering the record before us, we adopt the stipulated constructions provided below for purposes of this Decision. *See* Ex. 1005 (stipulated claim construction in the District of Arizona litigation).

"electric airflow sensor"	an electric sensor to detect air movement generated by a user's inhaling or puffing act
"time period and a magnitude of the electric current"	the duration of time and the strength of the current that is provided to the heating element
"diaphragm microphone"	a device for converting pressure waves into electrical energy using a thin sheet of material that is capable of vibrating
"Single Chip Micyoco"	a microcontroller including a processor, software instructions to be executed by the processor, memory, and I/O processed by the processor
"instructs"	provides a signal that tells the power supply to provide or not provide electricity to the inhaler and atomizer

Ex. 1005, 1–2.

C. Asserted Anticipation and/or Obviousness over Tao

Petitioner contends that claims 13–15 are anticipated by, or would have been obvious over, Tao. Pet. 22–32.

1. Overview of Tao

Tao "relates to a simulated cigarette . . . intended to overcome the disadvantages of complex structure, high manufacturing costs, and a poor simulation effect in the prior art." Ex. 1006, code (57). Tao's Figure 1 is reproduced below.

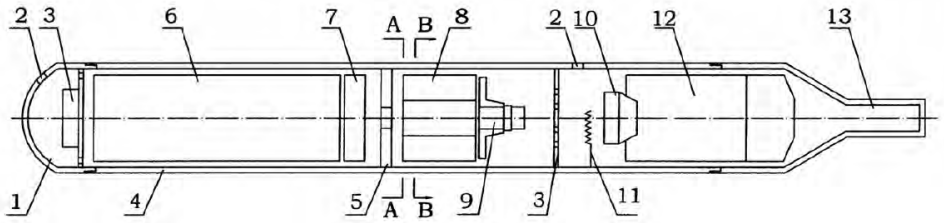


FIG. 1

Figure 1 is a schematic structural drawing of the simulated cigarette described in Tao. *Id.* at 7. Housing 4 includes light-simulating end 1 and mouthpiece 13. *Id.* Battery 6 and a vaporization controller comprising circuit board 7 and electret microphone 8 are arranged in sequence from simulated light emitting end 1. *Id.* Tao teaches that "electric circuit board 7 is composed of a microprocessor and an ultrasonic circuit." *Id.* An output terminal of electret microphone 8 is connected to electronic circuit board 7, and an output terminal of electronic circuit board 7 is connected to vaporizer 10. *Id.*

Tao teaches that, when a smoker inhales, air flowing through air inlet 2 is received by electret microphone 8. Ex. 1006, 8. In response, electret microphone 8 sends a signal to the microprocessor in electric circuit board 7, which causes the microprocessor to transmit an instruction to the ultrasonic circuit for transmission to vaporizer 10. *Id.* After receiving the instruction, vaporizer 10 starts and vaporizes an e-liquid in an e-liquid reservoir, and vaporized droplets are suspended to form an aerosol, which is inhaled by the user through mouthpiece 13. *Id.*

2. Analysis

In relevant part, Claim 13 recites that "the Single Chip Micyoco receives the signal from the electric airflow sensor" and "instructs the electric power source to send an electric current to the electronic atomizer, and a time period and a magnitude of the electric current." Ex. 1001, 7:46–

8:2. Petitioner identifies Tao's ultrasonic circuit plus battery 6 as the claimed "electric power source" and Tao's electret microphone 8 as the claimed "airflow sensor." Pet. 24–25 (citing Ex. 1006, 5–6), 26–27 (citing Ex. 1006, 6). Petitioner then points to Tao's teaching that after electret microphone 8 sends the signal to the microprocessor in electronic circuit board 7, "the microprocessor transmits an instruction to the ultrasonic circuit for transmission to the vaporizer 10," which "starts after receiving the instruction and vaporizes an e-liquid in an e-liquid reservoir." *Id*. at 27 (citing Ex. 1006, 6). Petitioner asserts that Tao teaches that the current supplied to vaporizer 10 is adjusted based on the signal the microprocessor receives from electret microphone 8, which "indicates the strength of the current provided to the electronic atomizer," and, "[t]o control the atomization quantity, Tao inherently teaches a duration of time for supplying the current to" vaporizer 10 for atomization. *Id*. at 28 (citing Ex. 1004 ¶ 109).

After considering the arguments and evidence of record, we are not persuaded that Petitioner adequately establishes that Tao discloses instructing a time period of the electric current sent to the electronic atomizer as required by claim 13. To establish anticipation, each and every element in a claim, arranged as recited in the claim, must be found in a single prior art reference. *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008); *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383 (Fed. Cir. 2001). "A reference may anticipate inherently if a claim limitation that is not expressly disclosed is 'necessarily present, or inherent, in the single anticipating reference.'" *In re Montgomery*, 676 F.3d 1375, 1379 (Fed. Cir. 2012) (quoting *Verizon Servs. Corp. v. Fibernet Va., Inc.*, 602 F.3d 1325, 1336–37 (Fed. Cir. 2010)).

Petitioner argues that Tao inherently[5] teaches the claimed time period of the electric current "to control the atomization quantity." Pet. 28 (citing Ex. 1004 ¶ 109). Petitioner, however, does not adequately explain how or why a person of ordinary skill in the art would understand Tao's teaching to control the quantity of atomization as necessarily disclosing the length of time the electric current is supplied to vaporizer 10 for atomization. Moreover, under the applicable standard for anticipation, neither Petitioner nor its declarant provides any analysis that would show that one skilled in the art would have reasonably understood or inferred from Tao that the quantity of atomization is controlled by the duration of time of the current that is supplied to the heating element. *See Eli Lilly & Co. v. L.A. Biomedical Research Inst.*, 849 F.3d 1073, 1074–1075 (Fed. Cir. 2017) ("[T]he dispositive question regarding anticipation is whether one skilled in the art would reasonably understand or infer from a prior art reference that every claim is disclosed in that reference.").

For these reasons, we determine that Petitioner does not establish a reasonable likelihood of prevailing in showing that claim 13, and claims 14 and 15 that depend directly therefrom, are anticipated by, or would have been obvious over, Tao.

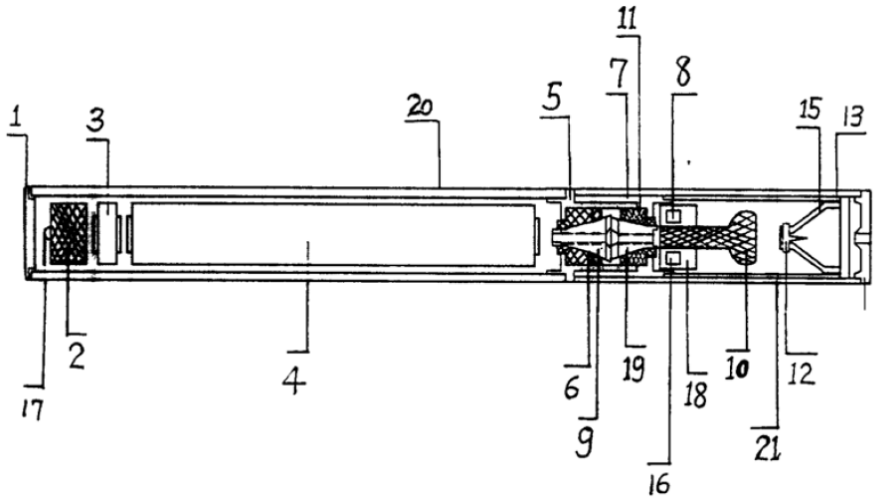
D. Asserted Obviousness over Yang and Tao

Petitioner contends that the combined teachings of Yang and Tao teach all of the limitations of claims 13–15. Pet. 32–40.

[5] Petitioner does not argue that Tao expressly discloses the claimed time period of the electric current, or that the claimed time period of the electric current would have been obvious over Tao. *See* Pet. 27–28

1. Overview of Yang

Yang relates to a "cigarette-simulating electronic device that simulates the cigarette smoking effect, has a similar form, a similar feeling process, and has the cigarette smoking effect and feeling." Ex. 1009, 3. A diagram of Yang's cigarette-simulating electronic device is reproduced below:



The figure is a schematic diagram of an internal structure of a cigarette-simulating electronic device described in Yang. *Id.* at 4. The device is comprised of a stainless steel tube divided into a long part and a short part connected to form a housing that "has a similar dimension scale as a cigarette, and has a shape resembling a mouthpiece-tipped cigarette after surface treatment." *Id.* at 4–5. Firelight-simulating airflow guide lamp 1 is arranged at the air inlet end of the long stainless steel tube, with integrated circuit board 2, sensing device 3, battery 4, and annular airflow guide screw 5 arranged inside in sequence from the air inlet end, "thereby forming an independent control and energy output system." *Id.* at 5. Annular airflow guide nut 7, smoke generator 18, gas-liquid mixing chamber 8, funnel-shaped puncturing filter 15, dust-proof damping cover 14, and plastic

sheath 21 are arranged inside the short stainless tube "in sequence to jointly form a mouthpiece system." *Id*.

Annular airflow guide screw 5 includes a hollow screw, electric insulative isolation layer 6, and negative terminal 9, which has a hole in the center so that operating airflow can be led out and electric energy can be outputted. Ex. 1009, 5. Similarly, annular airflow guide nut 7 includes a hollow nut with negative terminal 19 arranged in the center, and electric insulative isolation layer 11 arranged around negative terminal 19 "to isolate the negative terminal from the nut, so as to guide the airflow to pass through." *Id*. Negative terminal 19 is connected to annular airflow guide screw 5 and negative terminal 9 to form a power supply circuit. *Id*. Smoke generator 18 includes gas-liquid mixing chamber 8 and heating coil 16. *Id*.

Yang teaches that when airflow enters from the air inlet end, the airflow's vibration causes sensor 3 to send a pulse signal to a controller in integrated circuit 2 that controls the electric energy to supply power to heating coil 16. Ex. 1006, 5–6. The controller instructs heating coil 16 to operate, which causes the liquid tobacco in gas-liquid mixing chamber 8 to be gasified to form smoke. *Id*. at 6.

2. Analysis

Petitioner contends that Yang teaches all of the elements of claim 13 except "an electric airflow sensor," which Petitioner contends Tao discloses. Pet. 32–37. Patent Owner responds that Petitioner does not establish that the proposed combination discloses a single chip micyoco that instructs the magnitude of the electric current to be sent to the electronic atomizer, as required by claim 13. Prelim. Resp. 14–18.

In relevant part, Claim 13 recites that "the Single Chip Micyoco receives the signal from the electric airflow sensor" and "instructs the

electric power source to send an electric current to the electronic atomizer, and a time period and a magnitude of the electric current." Ex. 1001, 7:44–8:2. Petitioner asserts that "Yang teaches that the cigarette-simulating electronic device includes 'an integrated circuit board 2,'" and "integrated circuit board 2 has 'a controller,' also referred to as 'an electronic controller.'" Pet. 35 (citing Ex. 1009, 5). Petitioner contends that Yang teaches that the electronic controller in integrated circuit board 2 controls the electric energy supplied to power heating coil 16 (the heat source in smoke generator 18). *Id.* (citing Ex. 1009, 6). In particular, Petitioner points to Yang's teaching that "[w]hen airflow enters from the air inlet end, the vibration of the airflow causes the sensor 3 to work and send out a pulse signal, so that a controller in the integrated circuit 2 is started." *Id.* (citing Ex. 1009, 6). Petitioner also contends that Yang "teaches the controller sends instruction to a power amplifier of the integrated circuit 2 such that the power amplifier 'keeps supplying power to a smoke generator 18 for a set period of time.'" *Id.* (citing Ex. 1009, 6). According to Petitioner, "[a] POSITA would have understood the electronic controller to be the 'Single Chip Micyoco.'" *Id.* (citing Ex. 1004 ¶ 123).

Patent Owner argues that "Yang fail[s] to disclose the type of 'integrated circuit' and/or its controller components" and "did not disclose a single chip microcontroller." Prelim. Resp. 17. In that regard, Patent Owner argues that, "other than conclusory expert testimony, Petitioner fails to provide any evidentiary basis how the nonspecific 'integrated circuit' and 'controller' disclosed by Yang renders the single chip micyoco of Claim 13 obvious." *Id.* Patent Owner further argues that "Yang does not provide a signal to the power supply that control[s] 'the strength of the current that is provided to the heating element,'" and instead "discloses simply an on/off

circuit, where the duration of the 'on' cycle is controlled, but not the magnitude of the current." *Id*. (citing Ex. 1009, 5–6).

We agree with Patent Owner that, on this record, Petitioner does not adequately establish that Yang teaches "instruct[ing] the electric power source to send an electric current to the electronic atomizer, and a time period and a magnitude of the electric current" as required by claim 13. As set forth above, we construe "a time period and a magnitude of the electric current" to mean "the duration of time and the strength of the current that is provided to the heating element." Yang teaches that "[a] power amplifier of the integrated circuit 2 keeps supplying power to a smoke generator 18 *for a set period* after receiving an instruction from the controller, so that the smoke generator operates to form smoke." Ex. 1009, 5 (emphasis added). Petitioner does not direct us to, nor do we discern, any teaching in Yang regarding the *magnitude* of the electric current supplied to smoke generator 18. *See* Pet. 37. Petitioner does not rely on Tao for this element of claim 13. *Id*.

For these reasons, we determine that Petitioner does not establish a reasonable likelihood that it would prevail in showing that independent claim 13, or claims 14 and 15 that depend directly therefrom, would have been obvious over the combined teachings of Yang and Tao.

E. Asserted Anticipation and/or Obviousness over Wang411

Petitioner contends that claims 13 and 14 are anticipated by, or would have been obvious over, Wang411. Pet. 40–45.

1. Overview of Wang411

Wang411 "relates to an alternative smoking device, to be used to reduce the negative effects of classic smoking." Ex. 1012 ¶ 2. The smoking device described in Wang411 includes "an accumulator 21 for storing and

releasing electric energy, a heating device 22 such as a resistive coil, a charging interface 28, and control electronics 23." *Id.* ¶ 18. Wang411 teaches that "the components making up the control electronics 23 are preferably laid-out on a circuit board," including processor 23.1. *Id.* ¶ 21. "The processor 23.1 is preferably a Field Programmable Grid Array (FPGA) specially set up to achieve all the functions required to operate the smoking device," such as electronically filtering signals received from sensor device 24, controlling the temperature of heating device 22, and monitoring the energy reserves of accumulator 21. *Id.* Wang411 teaches that processor 23.1 "can be programmed to apply a specially customized temperature variation scheme that optimizes the life of the accumulator 21." *Id.* ¶ 23. Wang411 further teaches that the main purpose of sensor device 24 is to detect airflow and emit a signal to control electronics 23, "which in turn will cause the accumulator 22 to release its entire energy to the heating device 22 in order to reach the" desired temperature level. *Id.* ¶ 27. According to Wang411, sensor device 24 is most preferably an electret microphone. *Id.* ¶ 26.

2. Analysis

Petitioner contends that Wang411 teaches all of the elements of independent claim 13. Pet. 40–45. For example, Petitioner contends that Wang411 teaches "a tubular electronic atomizer" (the portion of first device 20 that includes heating device 22), "an electric power source" (accumulator 21), and "an electric airflow sensor" (sensor device 24). *Id.* at 41–44 (citing Ex. 1004 ¶¶ 136, 137; Ex. 1012 ¶¶ 21, 22, 26, 27).

With respect to the "wherein the Single Chip Micyoco receives the signal from the electric airflow sensor, instructs the electric power source to send an electric current to the electronic atomizer, and time period and a

magnitude of the electric current," Petitioner contends that "Wang411 teaches, in response to the signal emitted from the sensor device 24, the control electronics 23 'cause[s] the accumulator 22 to release its entire electric energy to the heating device.'" Pet. 44 (citing Ex. 1012 ¶ 27). Petitioner also points to Wang411's teaching that

> the processor 23.1 of the control electronics 23 can be programmed to apply a specially customized temperature variation scheme . . . takes into account the ambient temperature since a variation of it has direct influence of the temperature of the air entering the smoking device 10, *i.e.*, the lower the ambient temperature, the more energy must be provided to the heating device 22 to sufficiently heat up the airflow to be able to dissolve the agent 33.

Id. at 45 (quoting Ex. 1012 ¶ 23) (alterations in original).

We are not persuaded that Petitioner adequately establishes that Wang411 teaches "instruct[ing] the power source to send an electric current to the electronic atomizer, and a time period and a magnitude of the electric current" as required by claim 13. As set forth above, we construe "a time period and a magnitude of the electric current" to mean "the duration of time and the strength of the current that is provided to the heating element." Wang411 teaches that "sensor device 24 has the main purpose to detect airflow through the first device 20 emitting a signal to the control electronics 23 which in turn will cause the accumulator 22 *to release its entire energy* to the heating device [] in order to reach" the desired temperature level. Ex. 1012 ¶ 27 (emphasis added). Petitioner does not adequately explain, on this record, how or why an instruction to accumulator 22 (the electric power source) to release all of its energy is an instruction of the duration of time and the strength of the current that is provided to the heating device. Moreover, although Petitioner notes that

Wang411 teaches that processor 23.1 can be programmed to apply a customized temperature variation scheme, Petitioner does not explain how or why such a scheme relates to the duration of time and the strength of the current accumulator 22 is directed to provide to the heating device.

For these reasons, we determine that Petitioner does not establish a reasonable likelihood that it would prevail in showing that independent claim 13, and claim 14 that depends therefrom, are anticipated by, or would have been obvious over, Wang411.

III. CONCLUSION

Based on the arguments in the Petition and the Preliminary Response, and the evidence of record, we determine that Petitioner has not established a reasonable likelihood that it would prevail on its challenge that claims 13–15 of the '622 patent are unpatentable.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that that the Petition is *denied* and no trial is instituted.

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