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14/141,146	12/26/2013	Niranjan Maharajh	34089-186	9337
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POTTER ANDERSON & CORROON LLP ATTN: JANET E. REED, PH.D. P.O. BOX 951 WILMINGTON, DE 19899-0951			DODSON, JUSTIN C	
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The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte NIRANJAN MAHARAJH, GENE FAISON,
SUDARSAN SRINIVASAN, DAVID AMMANN,
DONALD BROOKMAN, AMIT LIMAYE, and RONALD FORMOSA

Appeal 2019-003529
Application 14/141,146
Technology Center 3700

Before MICHAEL C. ASTORINO, BRADLEY B. BAYAT, and
TARA L. HUTCHINGS, *Administrative Patent Judges*.

HUTCHINGS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1–3, 6–12, 14, 16–20, and 23. We have jurisdiction under 35 U.S.C. § 6(b).²

¹ We use the term “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Our decision references Appellant's Appeal Brief (“Appeal Br.,” filed Sept. 4, 2018) and Reply Brief (“Reply Br.,” filed Mar. 28, 2019), and the Examiner's Answer (“Ans.,” mailed Jan. 28, 2019), and Final Office Action (“Final Act.,” mailed Mar. 30, 2018). Appellant identifies Philip Morris USA Inc. as the real party in interest. Appeal Br. 2.

² Claims 4, 5, 13, 15, 21, 22, and 24 were canceled. *Id.*

We AFFIRM.

CLAIMED INVENTION

Appellant’s invention relates to “an aerosol generator wherein a liquid formulation is at least partially vaporized in a capillary passage and discharged from the capillary passage to form an aerosol.” Spec. ¶ 3. The invention includes a fluidic element that “increases the pressure of the liquid formulation as the liquid formulation enters the capillary passage.” *Id.*

Claim 1, reproduced below, is the sole independent claim on appeal and representative of the subject matter on appeal (emphasis added):

1. A method of producing an aerosol comprising:
 - supplying a liquid material to a heated capillary passage located in an aerosol generation system, the aerosol generation system comprising:
 - an aerosol generator comprising the heated capillary passage having an inlet and an outlet, wherein the liquid material is at least partially vaporized in the heated capillary passage;
 - a pumping unit adapted to supply the liquid material to the aerosol generator; and
 - a fluidic element located between the pumping unit and the inlet of the heated capillary passage, wherein the fluidic element is a backpressure inducing fluidic element, which dampens pressure oscillations in the aerosol generation system;*
 - and
 - introducing the backpressure to the aerosol generation system created by the fluidic element, thereby at least partially vaporizing the liquid material in the heated capillary passage and discharging the at least partially vaporized liquid material from the outlet of the heated capillary passage to form the aerosol.

REJECTIONS

Claims 1–3, 10, and 17 are rejected under 35 U.S.C. § 103(a) as unpatentable over Maharajh et al. (US 2006/0047368 A1, pub. Mar. 2, 2006)

(“Maharajh”), Howell et al. (US 5,743,251, iss. Apr. 28, 1998) (“Howell”), and Nichols et al. (US 2005/0235991 A1, pub. Oct. 27, 2005) (“Nichols”).

Claims 6, 11, and 18 are rejected under 35 U.S.C. § 103(a) as unpatentable over Maharajh, Howell, Nichols, and Nguyen et al. (US 7,147,170 B2, iss. Dec. 12, 2006) (“Nguyen”).

Claims 7–9 are rejected under 35 U.S.C. § 103(a) as unpatentable over Maharajh, Howell, Nichols, and Baran (US 5,964,223, iss. Oct. 12, 1999).

Claims 12, 14, 16, 19, 20, and 23 are rejected under 35 U.S.C. § 103(a) as unpatentable over Maharajh, Howell, Nichols, and Sievers et al. (US 2002/0018815 A1, pub. Feb. 14, 2002) (“Sievers”).

ANALYSIS

Claim 1 recites “a fluidic element located between the pumping unit and the inlet of the heated capillary passage, wherein the fluidic element is a backpressure inducing fluidic element, which dampens pressure oscillations in the aerosol generation system.” Appeal Br., Claims App. 1. The Examiner interprets the limitation “backpressure inducing fluidic element, which dampens pressure oscillations in the aerosol generation system” under 35 U.S.C. § 112, sixth paragraph. Final Act. 6–7; Ans. 5. Specifically, the Examiner determines that the term “backpressure inducing fluidic element” is a generic placeholder that is not modified structurally, and performs a recited function (i.e., “dampens pressure oscillations in the aerosol generating system”) without reciting sufficient structure to perform the recited function. Final Act. 6; *see also id.* at 7 (finding that “backpressure inducing . . . conveys no known structure for performing the claimed function[] and, accordingly, is not considered to be a structural modifier”).

Appellant does not dispute the Examiner's interpretation in the Appeal Brief. In the Reply Brief, for the first time, Appellant argues that the claimed fluidic element does not invoke interpretation under § 112, sixth paragraph. Reply Br. 2–3. Appellant states that the claim does not use the term “means” or “step,” and thus, there is a rebuttable presumption that the claimed fluidic element does not invoke § 112, sixth paragraph. *Id.* at 2.

Appellant argues that the presumption is not overcome because

[i]n this particular case, one of ordinary skill in the art would recognize that the claimed ‘fluidic element located between the pumping unit and the inlet of the heated capillary passage’ has sufficiently definite structure for performing the claimed function (i.e., introducing backpressure and dampening pressure oscillations in the aerosol generation system).

Id. at 3.

Putting aside the issue of waiver,³ Appellant does not persuade us that the Examiner erred in interpreting the claimed backpressure inducing fluidic element. Although omitting the word “means” in a claim term creates a rebuttable presumption that § 112, sixth paragraph does not apply, the

³ Arguments not timely presented in an Appeal Brief generally will not be considered when filed in a Reply Brief absent a showing of good cause why the argument could not have been timely presented in the Appeal Brief. *See* 37 C.F.R. § 41.41(b)(2) (2012); *see also In re Hyatt*, 211 F.3d 1367, 1373 (Fed. Cir. 2000) (noting that an argument not first raised in the brief to the Board is waived on appeal); *Ex parte Nakashima*, 93 USPQ2d 1834, 1837 (BPAI 2010) (informative) (explaining that arguments and evidence not timely presented in the Principal Brief, will not be considered when filed in a Reply Brief, absent a showing of good cause explaining why the argument could not have been presented in the Principal Brief).

presumption can be overcome if the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function. *See Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348–49 (Fed. Cir. 2015) (en banc).

Here, we agree with the Examiner that the claimed backpressure inducing fluidic element uses a generic placeholder coupled with functional language without reciting sufficient structure to achieve the function. Final Act. 6–7. For example, a generic placeholder, “element” — having no specific structural meaning — is preceded by the terms “backpressure inducing” and “fluidic.” “Backpressure inducing” and “fluidic” modify the generic placeholder functionally, not structurally. The claimed backpressure inducing fluidic element performs the function of dampening pressure oscillations in the aerosol generation system. However, claim 1 does not recite sufficient structure to perform the recited dampening function. Instead, the claim recites that the backpressure inducing fluidic element is located between the pumping unit and the inlet of the heated capillary passage. This language pertains to location of the fluidic element, not its structure, and, thus, adds no structural significance to avoid interpretation under § 112, sixth paragraph.

Under § 112, sixth paragraph, a claim limitation “shall be construed to cover the corresponding structure . . . described in the specification and equivalents thereof.” According to the Examiner, the Specification describes a “tubular member” as a structure corresponding to the claimed fluidic element. Final Act. 7 (citing Spec. ¶ 35, Figs. 5A, 5B); Ans. 5 (“Figures 5a-b and paragraph 0035 of the specification disclose fluidic element 100 being a tubular member.”). Appellant does not dispute the

Examiner’s finding that a tubular member is a corresponding structure identified in the Specification. *See generally* Appeal Br. 6–9; Reply Br. 2–4.

Turning to the prior art, the Examiner finds that Maharajh discloses a tubular element. Ans. 5. Specifically, the Examiner finds that Maharajh inherently discloses a fluid communication passage or conduit that is shown in Figure 3 as a line between pumping unit 335 and heated capillary passage 323, which is structurally a tubular element. *See id.*; *see also* Final Act. 11. The Examiner further finds that “the structure of Maharajh would be capable, at least to some extent, of inducing a backpressure and dampening pressure oscillations.” Ans. at 5–6. Thus, the Examiner finds that the corresponding tubular structure described in the Specification and Maharajh’s fluidic element’s structure are equivalents, and that Maharajh’s equivalent structure is capable of performing the specified function. Appellant does not dispute the Examiner’s underlying factual findings and evidentiary support with any particularity or otherwise apprise us of Examiner error. *See* Reply Br. 4–5.

In view of the foregoing, we sustain the Examiner’s rejection of claim 1 under 35 U.S.C. § 103(a). For the same reasons, we also sustain the Examiner’s rejections of dependent claims 2, 3, 6–12, 14, 16–20, and 23, which are not argued separately.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Basis/References	Affirmed	Reversed
1–3, 10, 17	103(a)	Maharajh, Howell, Nichols	1–3, 10, 17	

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Claims Rejected	35 U.S.C. §	Basis/References	Affirmed	Reversed
6, 11, 18	103(a)	Maharajh, Howell, Nichols, Nguyen	6, 11, 18	
7-9	103(a)	Maharajh, Howell, Nichols, Baran	7-9	
12, 14, 16, 19, 20, 23	103(a)	Maharajh, Howell, Nichols, Sievers	12, 14, 16, 19, 20, 23	
Overall Outcome			1-3, 6-12, 14, 16-20, 23	

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED