

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HP INC.,
Petitioner,

v.

MEMJET TECHNOLOGY LIMITED,
Patent Owner.

Case IPR2016-00356
Patent 9,056,475 B2

Before JAMESON LEE, LYNNE E. PETTIGREW, and
JOHN F. HORVATH, *Administrative Patent Judges*.

HORVATH, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. Background

HP Inc. (“Petitioner”) filed a Petition (Paper 2, “Pet.”) to institute *inter partes* review of claims 1–5 of U.S. Patent No. 9,056,475 B2 (Ex. 1001, “the ’475 patent”). Memjet Technology Limited (“Patent Owner”) filed a Preliminary Response (Paper 6, “Prelim. Resp.”).

Upon consideration of the Petition and Preliminary Response, we are not persuaded, under 35 U.S.C. § 314(a), that Petitioner has demonstrated a reasonable likelihood that it would prevail in showing the unpatentability of any of claims 1–5 of the ’475 patent. Accordingly, we do not institute an *inter partes* review of these claims.

B. Related Matters

Petitioner identifies the following as a matter that could affect, or be affected by, a decision in this proceeding: *Memjet Technology Ltd. v. Hewlett-Packard Co.*, Case No. 3:15-cv-01769-BEN-BLM (S.D. Cal.).
Pet. 1. Patent Owner identifies the following as a matter that could affect, or be affected by, a decision in this proceeding: *Memjet Technology Ltd. v. Hewlett-Packard Co.*; Case No. 15-cv-18769-BEN-BLM (S.D. Cal.).¹
Paper 5, 1.

¹ We do not find the District Court case identified by Patent Owner. To the extent Patent Owner has misidentified the District Court case identified by Petitioner, Patent Owner should correct its mandatory notices. *See* 37 C.F.R. §§ 42.8(a)(3) and 42.8(b)(2).

C. Evidence Relied Upon²

Reference		Issue Date	Exhibit
Mizusawa	US 4,947,190	Aug. 7, 1990	Ex. 1004
Freund	US 6,382,850 B1	May, 7, 2002	Ex. 1005

D. The Asserted Grounds of Unpatentability

Petitioner asserts the following grounds of unpatentability:

Reference(s)	Basis	Claims Challenged
Mizusawa	§ 102(b)	1–5
Mizusawa and Freund	§ 103(a)	1–5

II. ANALYSIS

A. The '475 Patent

The '475 patent discloses an inkjet printer having a pagewidth printhead assembly and an associated nozzle capping mechanism. Ex. 1001, 1:21–24. A “pagewidth” printhead assembly is one in which the length of the printhead extends substantially across the width of the media to be printed. *Id.* at 1:24–27. The printhead includes a plurality of nozzles that are prone to blockage because the ink they contain tends to dry up due to exposure to both particulate matter (e.g., paper dust) and air during printer idle times. *Id.* at 2:37–40.

To prevent nozzle blockage, the '475 patent teaches employing nozzle capping, purging, and wiping procedures during printer idle times.

² Petitioner also relies upon the Declaration of Stephen Pond, Ph.D. (Ex. 1002).

Ex. 1001, 2:44–46. Purging removes excess ink from the nozzle chambers by evacuating them. *Id.* at 2:48–50. Wiping removes surface ink from the faces of the nozzles. *Id.* at 2:50–54. And capping prevents residual ink in the nozzle chambers from being exposed to drying dust or air. *Id.* at 2:46–47.

Figures 27A and 27B of the '475 patent are reproduced below.

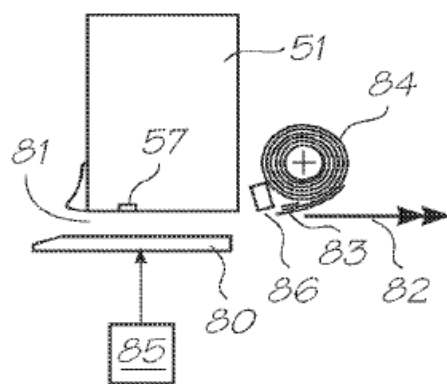


FIG. 27A

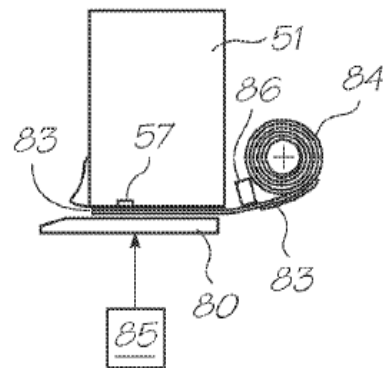


FIG. 27B

Figures 27A and 27B illustrate a capping mechanism for nozzles 57 in pagewide printhead 51. When capping is performed (e.g., during printer idle times), any print media (e.g., paper) in the printer is advanced past printhead 51 in the direction of arrow 82. Ex. 1001, 91:14–15. Actuator 85 lowers platen 80, and a sheet-like capping member 83 is fed through gap 81 from replaceable roll 84. *Id.* at 91:9–11, 91:16–18. Actuator 85 then raises platen 80 so that capping member 83 engages printhead nozzles 57. *Id.* at 91:19–21. When capping is no longer required, capping member 83 is separated from roll 84 by cutter 86, and spent capping member 83 is advanced past printhead 51 in the direction opposite arrow 82. *Id.* at 91:22–26.

Claim 1 of the '475 patent, the only independent claim, is representative of the challenged claims, and is reproduced below. Other challenged claims depend directly or indirectly from claim 1.

1. An inkjet printer comprising:

(a) a pagewidth inject printhead having a plurality of nozzles for delivering ink onto print media fed past the printhead; and

(b) a maintenance assembly for maintaining the printhead, the maintenance assembly comprising:

(i.) an elongate web of material having a width corresponding substantially to a length of the printhead;

(ii) one or more rollers for supporting the web;

(iii) a web support member positioned opposite the printhead for supporting a maintenance portion of the web, the web support member being operatively urged towards the printhead, the maintenance portion of the web being positioned between the web support member and the printhead;

(iv) a web-feeding mechanism for advancing the web past the printhead; and

(v) an actuating mechanism for configuring the printer in either one of:

a first position in which the maintenance portion of the web is engaged with the printhead during a maintenance operation; and

a second position in which the maintenance portion of the web is disengaged from the printhead,

(vi) wherein, during printing, the web is positioned either upstream only or downstream only of the printhead relative to a media feed direction.

Ex. 1001, 100:25–51.

B. Claim Construction

The Board interprets claims of an unexpired patent using the broadest reasonable interpretation in light of the specification of the patent in which they appear. *See* 37 C.F.R. § 42.100(b); *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1275–79 (Fed. Cir. 2015), *cert. granted sub nom. Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 890 (mem.) (2016). Consistent with the rule of broadest reasonable interpretation, claim terms are generally given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *See In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Only those terms which are in controversy need to be construed and only to the extent necessary to resolve the controversy. *See Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

Petitioner construes the terms “elongate web of material,” and “the web is positioned either upstream only or downstream only of the printhead.” *See* Pet. 15–16, 18. Patent Owner disputes Petitioner’s construction of the term “elongate web of material,” and provides an alternative construction, but does not dispute Petitioner’s construction of the

term “the web is positioned either upstream only or downstream only of the printhead.” *See* Prelim. Resp. 19–20, 28.

Neither party construes any other term required by any of claims 1–5 of the ’475 patent, including the term “web-feeding mechanism for advancing the web past the printhead,” which is required by independent claim 1. *See* Pet. 15–20; Prelim. Resp. 19–28. Section 112, paragraph 6, of Title 35 (pre-AIA)³ states:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

When a claim limitation does not include the word “means,” a rebuttable presumption is created that § 112, ¶ 6 does not apply. *See Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015). However, this presumption can be overcome if the limitation “fails to ‘recite[] sufficiently definite structure’ or else recites ‘function without reciting sufficient structure for performing that function.’” *Id.* (quoting *Watts v. XL Sys., Inc.*, 232 F.3d 877, 880 (Fed. Cir. 2000)).

The limitation “web-feeding mechanism for advancing the web past the printhead” recites a function—advancing the web past the printhead—without reciting sufficient structure for performing that function. The only “structure” recited for advancing the web past the printhead is a web-feeding mechanism. But “mechanism” is a nonce word that fails to connote definite

³ Pub. L. No. 112–29, 125 Stat. 284 (2011)

structure. *See Williamson*, 792 F.3d at 1350 (“Generic terms such as ‘mechanism,’ ‘element,’ ‘device,’ and other nonce words . . . reflect nothing more than verbal constructs [that] may be used in a claim in a manner that is tantamount to using the word ‘means’ because they ‘typically do not connote sufficiently definite structure’ and therefore may invoke § 112, ¶ 6.”). Thus, the only “structure” recited for performing the function of advancing the web past the printhead—a web-feeding mechanism or mechanism for feeding the web—is little more than a redundant statement of the function that is to be performed. Accordingly, the “web-feeding mechanism” limitation recited in claim 1 is a means-plus-function limitation that is subject to construction pursuant to 35 U.S.C. § 112, ¶ 6.

Board rules require Petitioner to set forth “a statement of the precise relief requested for each claim challenged,” 37 C.F.R. § 42.104(b), including “[h]ow the challenged claim is to be construed.” *Id.* § 42.104(b)(3). For means-plus-function limitations, “the construction of the claim must identify the specific portions of the specification that describe the structure, material, or acts corresponding to each claimed function.” *Id.* As noted above, Petitioner has not proffered a construction for the “web-feeding mechanism” limitation, and therefore has failed to identify the specific portions of the ’475 patent, if any, describing the structure, material, or acts corresponding to the function of advancing the web past the printhead.

C. Alleged Anticipation of Claims 1–5 by Mizusawa

Petitioner alleges claims 1–5 of the ’475 patent are anticipated by Mizusawa. Pet. 20–38. We are not persuaded on this record that Petitioner has demonstrated a reasonable likelihood of establishing the anticipation of claims 1–5 by Misuzawa.

1. Overview of Mizusawa

Mizusawa discloses an ink jet printer having “a contact cleaning mode in which a cleaning sheet . . . is brought into contact with the [printer’s] recording head.” Ex. 1004, Abstract. Mizusawa’s recording head IJH is a pagewidth ink jet printhead, i.e., one “in which discharge port[s] IJO are arranged . . . corresponding to the overall width (for example, an A4 size recording paper) . . . through which recording can be performed.” *Id.* at 5:24–32.

Figure 14 of Mizusawa is reproduced below:

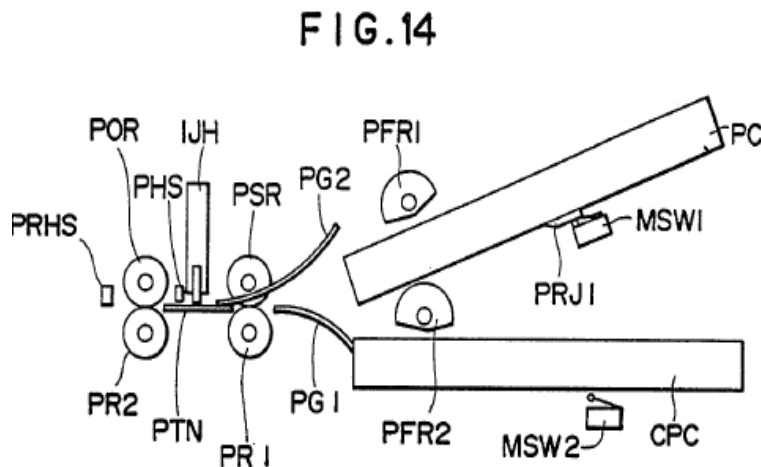


Figure 14 is a schematic illustration of an ink jet printer in which the printhead IJH can be supplied with either paper from a paper cassette (PC) or cleaning paper from a cleaning paper cassette (CPC). Ex. 1004, 15:37–58. When a recovery treatment button is pressed, cleaning paper is supplied to printhead IJH by rotation of paper supply rollers PFR2 and PSR, and by rotation of paper exhaust roller POR. *Id.* at 8:8–25, 15:61–68. The

activation of solenoid SND brings the cleaning paper into contact with discharge orifices IJO on printhead IJH by lifting platen PTN on which cleaning paper CP rests. *Id.* at 9:19–27, Fig. 4. The de-activation of solenoid SND releases cleaning paper CP from discharge orifices IJO, and subsequent rotation of paper supply roller PSR and paper exhaust roller POR conveys the released cleaning paper away from printhead IJH. *Id.* at 9:27–30, 9:36–39. The sandwiching and movement of cleaning paper CP between platen PTN and discharge orifices IJO removes dust and dried ink from the discharge orifices. *Id.* at 8:18–42, 9:31–35.

2. *Comparison of Claims 1–5 to Mizusawa*

Claims 1–5 require “a web-feeding mechanism for advancing the web past the printhead.” Ex. 1001, 100:40–41. Petitioner alleges Mizusawa’s paper supplying roller PSR and paper exhausting roller POR, which advance cleaning paper CP past recording head IJH, are a web-feeding mechanism. *See* Pet. 30–31, 51; Ex. 1004, 8:8–25, Fig. 14.

As noted in § II.B *supra*, the “web-feeding mechanism” is a means-plus-function limitation subject to construction under 35 U.S.C. § 112, ¶ 6. To prove unpatentability “of a means-plus-function claim, the invalidating prior art must disclose not simply a means for achieving the desired function, but rather the *particular structure* recited in the written description corresponding to that function, or an equivalent thereof.” *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1361 (Fed. Cir. 2001). That is, “a challenger who seeks to demonstrate that a means-plus-function limitation was present in the prior art must prove that the corresponding structure—or an equivalent—was present in the prior art.” *Fresenius USA, Inc. v. Baxter Int’l, Inc.*, 582 F.3d 1288, 1299 (Fed. Cir. 2009).

Petitioner has failed to identify any structure, material, or acts in the '475 patent corresponding to the function of advancing the web past the printhead. *See* 35 U.S.C. § 112, ¶ 6; *see also* 37 C.F.R. § 42.104(b)(3). Consequently, Petitioner has failed to sufficiently demonstrate that Mizusawa's paper supplying roller PSR and paper exhausting roller POR are the same as the structure disclosed in the '475 patent for advancing the web past the printhead, or an equivalent thereof. Accordingly, on this record, Petitioner has failed to show a reasonable likelihood that it would prevail in establishing the anticipation of claims 1–5 by Mizusawa.

D. Alleged Obviousness of Claims 1–5 over Mizusawa and Freund

Petitioner alleges—to the extent the Board construes an “elongate web of material” to be limited to the replaceable roll 84 of material disclosed in the '475 patent—that claims 1–5 of the '475 patent are unpatentable over Mizusawa and Freund. Pet. 38–39.

1. Overview of Freund

Freund discloses an ink jet printer for printing digital photographic images. Ex. 1005, 1:5–7. The ink jet printer includes “[a] full width, high resolution color ink jet print head 36.” *Id.* at 4:16. The ink jet printer includes “a roll paper supply 12, for supplying a web 14 of photographic ink jet print paper.” *Id.* at 2:66–3:2. The web 14 is supplied to a cut station 20 by a first pair of metering rollers 16. *Id.* at 3:6–7; Fig. 1. The cut station 20 includes metering rollers 22 and cutter 24, and operates to cut individual sheets 25 of photographic ink jet print paper from web 14. *Id.* at 3:8–9, 3:17–19.

2. *Comparison of claims 1–5 to the combination of Mizusawa and Freund*

As discussed in § II.C.2, *supra*, claims 1–5 require “a web-feeding mechanism for advancing the web past the printhead.” Ex. 1001, 100:40–41. Petitioner alleges Mizusawa’s paper supplying roller PSR and paper exhausting roller POR disclose this limitation. *See* Pet. 41, 51; Ex. 1004, 8:8–25, Fig. 14. As discussed in § II.C.2, *supra*, because Petitioner has failed to identify the structure in the ’475 patent corresponding to the web-feeding mechanism for advancing the web past the printhead, Petitioner has failed to sufficiently demonstrate that Mizusawa’s paper supplying roller PSR and paper exhausting roller POR are the same structure, or an equivalent thereof. Accordingly, on this record, Petitioner has failed to show a reasonable likelihood that it would prevail in establishing the unpatentability of claims 1–5 over Mizusawa and Freund.

III. CONCLUSION

Petitioner has failed to establish a reasonable likelihood that it would prevail in showing the unpatentability of claims 1–5 of the ’475 patent.

IV. ORDER

It is ORDERED that, pursuant to 35 U.S.C. § 314, no *inter partes* review is instituted on any ground.

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