

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DIGITAL CHECK CORP. d/b/a ST IMAGING,
Petitioner,

v.

E-IMAGEDATA CORP.,
Patent Owner.

Case IPR2017-00346
Patent 9,197,766 B2

Before KEN B. BARRETT, JENNIFER MEYER CHAGNON, and
MELISSA A., HAAPALA, *Administrative Patent Judges*.

BARRETT, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. *Background and Summary*

Digital Check Corp. d/b/a ST Imaging (“Petitioner”) filed a Petition requesting *inter partes* review of U.S. Patent No. 9,197,766 B2 (“the ’766 patent,” Ex. 1001). Paper 1 (“Pet.”). The Petition challenges the patentability of claims 41–43, 46, 49, 53, and 54 of the ’766 patent on grounds of obviousness under 35 U.S.C. § 103. e-ImageData Corp. (“Patent Owner”) filed a Preliminary Response to the Petition. Paper 5 (“Prelim. Resp.”).

An *inter partes* review may not be instituted “unless . . . the information presented in the petition . . . 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(a). Having considered the arguments and evidence presented by Petitioner and Patent Owner, we determine that Petitioner has not demonstrated a reasonable likelihood that it would prevail in establishing the unpatentability of the challenged claims of the ’766 patent.

B. *Related Proceedings*

Patent Owner identifies the ’766 patent as a continuation of U.S. Patent No. 9,179,019, which is a continuation of U.S. Patent No. 8,537,279, which is a continuation of U.S. Patent No. 8,269,890. Paper 4. One or both parties identify, as matters involving or related to the ’766 patent, a number of district court litigation matters involving these patents, including *e-ImageData Corp v. Digital Check Corp.*, No. 2:16-cv-576 (E.D. Wis.), and Patent Trial and Appeal Board cases IPR2017-00177 (U.S. Patent

lens 90; area sensor 97; first carriage 92; second carriage 98; first motor 100; second motor 108; timing pulleys 102, 106, 110, 114; and belts 104, 112. *See id.* at 5:8–6:11. Microform media support 44 is configured to support a microform media. *Id.* at 5:8–10. A fold mirror (not shown) reflects incident light transmitted through microform media and is connected to mirror mount 78, which is connected to chassis 66. *Id.* at 5:31–33, 5:36–38. Lens 90 is connected to first carriage 92, which is linearly adjustable by rotating first lead screw 86. *Id.* at 5:43–45. Area sensor 97 is connected to second carriage 98, which is linearly adjustable by rotating second lead screw 88. *Id.* at 5:52–54. First motor 100 is rotationally coupled to first lead screw 86 by timing pulley 102, belt 104 with teeth, and timing pulley 106; and second motor 108 is rotationally coupled to second lead screw 88 by timing pulley 110, belt 112 with teeth, and timing pulley 114. *Id.* at 6:7–9.

A controller (not shown) is electrically connected to first motor 100, second motor 108, and area sensor 97. *Id.* at 6:11–13. The controller receives commands and inputs, controls first and second motors 100, 108 and other components of the DMIA, and outputs an image data of area sensor 97. *Id.* at 6:13–17. The layout of the DMIA, including separately adjustable area sensor 97 and lens 90, and algorithms for moving the lens and sensor to appropriate respective locations to achieve proper magnification and focus of the image, allows the DMIA to autofocus to accommodate different reduction ratios of different film media without the need for iterative measurements and refocusing of lens 90. *Id.* at 5:61–6:3. The DMIA depicted in Figure 4 includes additional components not described.

D. Illustrative Claim

Of the challenged claims of the '766 patent, claims 41 and 49 are independent claims. The remaining challenged claims directly depend from claim 41 or claim 49. Claim 41, reproduced below, is illustrative:

41. A digital microform imaging apparatus, comprising:
- a support structure that forms first and second cavities, the first and second cavities spaced apart to form a substantially horizontal gap there between;
 - a microform media support structure mounted within the horizontal gap for movement along a substantially horizontal longitudinal direction and a substantially horizontal transverse direction that is substantially perpendicular to the longitudinal direction;
 - an illumination source mounted within the first cavity to direct light along a first substantially vertical optical axis across the gap and into a front portion of the second cavity;
 - a fold mirror including a reflecting surface, the fold mirror supported within the second cavity and aligned with the first optical axis so that at least a portion of the light from the illumination source is directed at the reflecting surface, the reflecting surface forming a substantially 45 degree angle with the first optical axis and directing light that subtends the reflecting surface along a substantially horizontal second optical axis that forms a substantially 90 degree angle with the first optical axis, the second optical axis extending away from the reflecting surface and toward a rear portion of the second cavity;
 - an area sensor supported within the second cavity and aligned along the second optical axis, the area sensor supported along the second optical axis for movement there along within a first range of movement; and
 - a lens supported within the second cavity between the fold mirror and the area sensor for movement along the second optical axis within a second range of movement, the second range overlapping the first range at least somewhat.

Ex. 1001, 12:20–52.

E. Applied References

Reference		Dates	Exhibit No.
Fujinawa	US 2004/0012827 A1	Filed Apr. 2, 2003; Published Jan. 22, 2004	Ex. 1004
Image Capture Techs., <i>Parts Manual for UC-6E, EC, ECM, Motorized Combo Squared Carrier Part Numbers 210000-01, 02, 03</i> (“Minolta”) ¹		Copyright 2002	Ex. 1009
Wally	US 5,574,577	Filed Apr. 11, 1994; Issued Nov. 12, 1996	Ex. 1011

Petitioner also relies on the Declaration of Anthony J. Senn, dated Nov. 30, 2016, (Ex. 1002) and the Declaration of Mr. Philip G. Barboni, dated Nov. 3, 2016, (Ex. 1010) in support of its arguments.

F. Asserted Grounds of Unpatentability

Petitioner asserts the following grounds of unpatentability:

References	Basis	Claims
Fujinawa and Minolta	§ 103(a)	41–43, 46, 49, 53, and 54
Fujinawa, Minolta, and Wally	§ 103(a)	41–43, 46, 49, 53, and 54

As a preliminary matter, we note that Petitioner collectively refers to both Exhibits 1008 and 1009 as “Minolta.” Pet. 5. But Exhibits 1008 and 1009 are two different references that describe different products, have different authors, and have copyright dates that differ by ten years. *See*

¹ We note that “Minolta” is not an author or the title of this reference, but as both Petitioner and Patent Owner refer to this reference as Minolta (*see e.g.*, Pet. 5, Prelim. Resp. 6), we use the same shortened form for consistency and to avoid confusion.

Ex. 1008, Ex. 1009. Petitioner does not provide any explanation or reason for why these references are collectively referred to as one reference. However, Petitioner states that the disclosures of Exhibit 1009 alone, in view of the declarations from its witnesses, are sufficient to support every assertion about Minolta in the asserted grounds, and that Exhibit 1008 is not required as the only support for any of the contentions. Pet. 6.

We determine Petitioner improperly conflates these two references in its challenges based on “Minolta.” In view of Petitioner’s statement that Exhibit 1009 is sufficient to support every assertion in its challenges, we exercise our discretion under 37 C.F.R. §§ 42.5(a) and 42.108(a) to confine “Minolta” in the applicable grounds in this proceeding to only Exhibit 1009. Where it is unclear as to which exhibit Petitioner is referring, we will treat the discussion as if it pertains to the exhibit not in the ground, Exhibit 1008. It is incumbent upon Petitioner to articulate an unambiguous ground.

II. ANALYSIS

A. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are given their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *see also* *Cuozzo Speed Techs. LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016). Under the broadest reasonable construction standard, claim terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire patent disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

Petitioner apparently does not propose an explicit claim construction for any term, asserting that it is applying the constructions of the District Court's claim construction order.² Pet. 16. On this record and for purposes of this decision, we determine that no claim terms require express construction.

*B. The Alleged Obviousness of Claims 41–43, 46, 49, 53, and 54
Over Fujinawa and Minolta*

Petitioner alleges that claims 41–43, 46, 49, 53, and 54 of the '766 patent would have been obvious over Fujinawa and Minolta. Pet. 17–52. Patent Owner opposes. Prelim. Resp. 3–24.

1. Fujinawa (Ex. 1004)

Fujinawa describes an image reading apparatus that can handle films having different sizes. Ex. 1004 ¶ 3. Figure 4 of Fujinawa is reproduced below:

² Petitioner does not provide a citation to an exhibit that is the referenced claim construction order. See Pet. 16. Patent Owner filed as Exhibit 2005 a Claim Construction Order, dated Nov. 4, 2016, issued by the United States District Court for the Eastern District of Wisconsin.

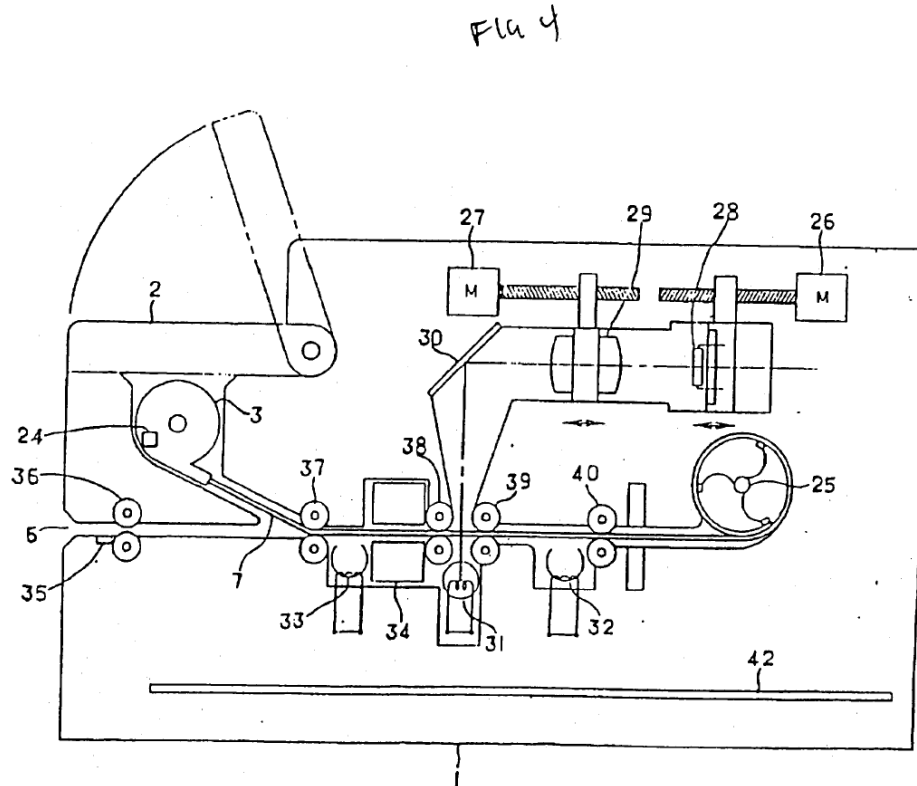


Figure 4 depicts one embodiment of an image reading apparatus during reading of roll film. *Id.* ¶ 22. Image reading apparatus 1 includes cartridge 3, used to house roll film, and insertion opening 6, used for inserting strip film and slide-mounted film. *Id.* ¶ 33. Image reading apparatus 1 further includes reading device motor 26, lens motor 27, line sensor 28, and reflective mirror 30. *Id.* ¶ 39. Lens 29 is supported by a worm that couples lens 29 to the rotating shaft of lens motor 27 so that it can move in accordance with rotation of the rotating shaft. *Id.* ¶ 59. Line sensor 28 is supported by a worm that couples line sensor 28 to rotating shaft of reading device motor 26 so that the position of the light-receiving surface can be moved in accordance with the rotation of the rotating shaft. *Id.* Fujinawa further describes that an area-type sensor could be provided instead of line sensor 28. *Id.* ¶¶ 49, 112. A central processing unit (CPU,

not depicted) determines the type of film inserted into image reading apparatus 1 from information provided by film information reading sensor 24 and film detection sensor 35. *Id.* ¶ 66. The CPU separately drives reading motor 26 and lens motor 27 to adjust the reading scope and resolution according to the results of this determination. *Id.* ¶¶ 60, 66. Opposing rollers 37, 38, 39, 40 are driven separately to convey the film at a constant speed during image reading via a line sensor. *See id.* ¶¶ 47, 48. Fujinawa explains: “As is known, if an area-type image sensor were provided instead of the line sensor 28, it would not be necessary to feed the film using rollers 38 and 39 during image reading of a frame.” *Id.* ¶ 49.

2. Minolta (Ex. 1009)

Minolta is a parts manual for the UC-6E, EC, and ECM Motorized Combo Squared Carrier. Ex. 1009, 1. The manual includes various assembly figures of the Motorized Combo Squared Carrier models and Bills of Material for different assemblies. *See* Ex. 1009. Petitioner’s witness, Mr. Barboni, testifies that the UC-6 models were designed to work universally with reader-printers for various companies, such as Minolta and Canon. Ex. 1010 ¶ 5.

3. Analysis of the Alleged Obviousness of Claim 41 in View of Fujinawa and Minolta

a) Reason to Combine

Claim 41 recites a microform media support structure mounted for movement in two horizontal directions, longitudinally and transversely. Ex. 1001, 12:24–28. Petitioner asserts that Fujinawa discloses a microform media support structure, Pet. 21–22, but “[a]rguably *Fujinawa* lacks” one configured specifically as recited, *id.* at 32. Petitioner contends that at least

Fujinawa's opposing rollers 37, 38, 39, and 40 together constitute a microform media support structure. Pet. 19, 21; Ex. 1002 ¶¶ 45, 46. For the recited horizontally movable configuration, Petitioner identifies Minolta's fiche assembly and bottom trays as the microform media support structure. Pet. 22–23; *see* Ex. 1009, 3 (items 5, 7). Petitioner reasons that Motorola's Universal Film Carrier was intended for use with a variety of readers and “[o]ne of skill in the art would recognize that *Minolta's* microform media support structure could be substituted for *Fujinawa's* microform media support structure.” Pet. 23–24 (citing Ex. 1002 ¶¶ 46, 48, 59, 73–75; Ex. 1008; Ex. 1010 ¶ 5).³ Patent Owner argues that one of ordinary skill in the art would not have modified Fujinawa with the teachings of Minolta. Prelim. Resp. 22.

We determine that Petitioner has not articulated adequate reasoning with rational underpinnings to support a conclusion of obviousness. *See In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). As an initial matter, we are not persuaded of the correctness of Petitioner's characterization of Fujinawa prior to modification. Petitioner asserts, without citation, that Minolta is like Fujinawa in that it discloses a media support structure that “is capable of moving along a substantially horizontal longitudinal direction and a substantially horizontal transverse direction that is substantially perpendicular to the longitudinal direction.” Pet. 22. Similarly, Mr. Senn, apparently referring to the purported media support structure of Fujinawa,

³ Petitioner, in the same discussion, also proposes a combination with an embodiment of the other Minolta reference, Ex. 1008. Pet. 32–33. As discussed above, we confine “Minolta” to only Ex. 1009 in the asserted grounds.

opines that “it would have been within the knowledge of one of ordinary skill in the art to mount the media support structure within the gap for movement in a longitudinal direction and transverse direction.” Ex. 1002 ¶ 46. Neither Petitioner nor Mr. Senn explains adequately, and we fail to see, how Fujinawa’s sets of opposing rollers—argued to be the media support structure—are capable of front-to-back and side-to-side movement or why one of ordinary skill would mount the rollers to be so configured. Further, Petitioner’s reasoning as to why one would modify Fujinawa by substituting the opposing rollers with the fiche assembly and related components of Minolta lacks adequate explanation and is too conclusory to meet Petitioner’s burden of demonstrating a likelihood of prevailing.⁴ See Pet. 23–24.

b) Overlapping Ranges of Movement

Claim 41 calls for the range of movement of the lens to overlap at least somewhat the range of movement of the area sensor. Ex. 1001, 12:44–52. Petitioner, relying on modified and annotated versions of Fujinawa’s Figure 4 and on the testimony of Mr. Senn, argues that the two components would have movement ranges that overlap. Pet. 26–32; see Ex. 1002 ¶ 53. Patent Owner argues that Fujinawa is silent as to the dimensions and that the figures are not drawn to scale and therefore cannot be used to establish the disclosure of the claimed overlapping. Prelim. Resp. 20. We agree with Patent Owner. Drawings can be cited against the claims of a patent even

⁴ Because we determine Petitioner does not provide sufficient reason to combine Fujinawa and Minolta, we decline to reach Patent Owner’s arguments that Minolta is not a printed publication, Prelim. Resp. 8–12.

though the features shown in the drawing are not explained in the specification. *In re Aslanian*, 590 F.2d 911, 914 (CCPA 1979). However, “it is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue.” *Hockerson-Halberstadt, Inc. v. Avia Group Int’l*, 222 F.3d 951, 956 (Fed. Cir. 2000). Here, Petitioner relies on the relative distances between components illustrated in Figure 4, but does not cite to any sections of Fujinawa which describe the proportions between the relied upon component or otherwise describe that Figure 4 is drawn to scale. *See* Pet. 29–31.

Further and as Patent Owner notes (Prelim. Resp. 21), Petitioner acknowledges (Pet. 27–29) that the sensor movement range is limited by stops that presumably would prevent the sensor from reaching the end its worm, yet asserts that the lens would travel unbounded to the end of the worm screw (*id.* at 30–31). Petitioner’s assumption is too speculative and questionable to establish a reasonable likelihood of prevailing in its challenge.

Lastly, Petitioner argues “it would have been obvious to one of skill in the art to adapt the length of the track (*e.g.*, track that constrains image sensor 28 movement) or the length of the worms to provide additional overlap of the ranges of motion.” Pet. 32. This argument is made without citation to supporting evidence and is conclusory, and therefore is not persuasive. *Id.*; *see* Ex. 1002 ¶ 53 (Mr. Senn asserting the similar conclusory opinion that such would have been within the knowledge of one of ordinary skill in the art).

c) Light Directed Into a Front Portion

Claim 41 recites “an illumination source mounted within the first cavity to direct light along a first substantially vertical optical axis across the gap and into a front portion of the second cavity.” Ex. 1001, 12:29–33. Petitioner argues that this feature is disclosed by Fujinawa, and specifically in Figure 4. Pet. 24–25. Patent Owner argues that this is incorrect and that Fujinawa directs light into a centrally located fold mirror, not the front portion of a second cavity. Prelim. Resp. 18–19.

Petitioner has not adequately shown how the disputed limitation is disclosed in Fujinawa. The illumination source and vertical portion of the light path in Fujinawa appear to be centrally located. See Pet. 25 (annotated version of Ex. 1004, Fig. 4). Further, we note that, even were the light path located along a side of the housing, that side would not be the front as Petitioner identifies a different side, the side with opening 6, as the front. See Pet. 44.

d) Conclusion as to Claim 41 and Analysis of the Remaining Challenged Claims

For the reasons discussed above, Petitioner has failed to demonstrate a reasonable likelihood of prevailing in its challenge of independent claim 41 as obvious over Fujinawa and Minolta. As to independent claim 49, Petitioner relies on the same unpersuasive contentions. See Pet. 46–47. The remaining claims subject to this ground, claims 42, 43, 46, 53, and 54, each directly depends from claim 41 or claim 49. Petitioner’s arguments against these dependent claims refer to and rely on the same contentions discussed above regarding the obviousness of claim 41 based on Fujinawa and Minolta. See Pet. 33–44, 47–52. Thus, for the same reasons discussed

above, Petitioner has not shown a reasonable likelihood of prevailing in showing that any of the challenged claims would have been obvious over Fujinawa and Minolta.

C. Analysis of the Alleged Obviousness of Claims 41–43, 46, 49, 53, and 54 Over Fujinawa, Minolta, and Wally

Petitioner offers this second ground in the alternative to the first, and challenges the same claims as in the first ground. *See* Pet. 52–53. Specifically, “Petitioner proposes Ground 2 where *Wally* is introduced solely for the purpose to illustrate a larger range of overlapping between the area sensor and the lens.” *Id.* at 53.

Petitioner’s articulation of this second ground relies primarily on the contentions made in the first ground and fails to cure the above-discussed defects regarding the reason to combine the references’ teachings and regarding the limitation concerning the light directed into a front portion.⁵ *See* Pet. 52–58. Thus, for the same reasons discussed above, Petitioner has not shown a reasonable likelihood of prevailing in showing that claims 41–43, 46, 49, 53, and 54 would have been obvious over Fujinawa, Minolta, and Wally.

III. CONCLUSION

Petitioner has not demonstrated that there is a reasonable likelihood of establishing the unpatentability of any of claims 41–43, 46, 49, 53, and 54 of the ’766 patent.

⁵ Because the failure to cure at least some defects in the ground based on the underlying combination of Fujinawa and Minolta is dispositive, we do not reach the merits regarding whether the further modification involving Wally would cure the defect concerning the overlapping movement ranges.

IV. ORDER

For the foregoing reasons, it is
ORDERED that the Petition is *denied* as to the challenged claims, and
no trial is instituted.

For PETITIONER:

Jason A. Engel
Robert J. Barz
K&L GATES LLP
jason.engel@klgates.com
robert.barz@klgates.com

For PATENT OWNER:

Johanna M. Wilbert
Joel A. Austin
Michael T. Piery
QUARLES & BRADY LLP
johanna.wilbert@quarles.com
joel.austin@quarles.com
michael.piery@quarles.com