Paper 9

Date: June 16, 2014

### UNITED STATES PATENT AND TRADEMARK OFFICE

\_\_\_\_\_

BEFORE THE PATENT TRIAL AND APPEAL BOARD

\_\_\_\_\_\_

HANDI QUILTER, INC. and TACONY CORPORATION, Petitioners,

V.

BERNINA INTERNATIONAL AG, Patent Owner.

\_\_\_\_\_

Case IPR2014-00270 Patent 6,883,446 B2

Before FRED E. McKELVEY, JENNIFER S. BISK, and MICHAEL J. FITZPATRICK, *Administrative Patent Judges*.

BISK, Administrative Patent Judge.

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

### I. INTRODUCTION

Handi Quilter, Inc. and Tacony Corporation (collectively, "Petitioner") filed a corrected petition for *inter partes* review of claims 8, 9, 11, 14-16, 22, and 32 of U.S. Patent No. 6,883,446 ("the '446 patent"). Paper 6 ("Pet."). Patent Owner, Bernina International AG, filed a Preliminary Response pursuant to 35 U.S.C. § 313. Paper 8 ("Prelim. Resp."). We have authority to determine whether to institute an *inter partes* review. 35 U.S.C. § 314(b); 37 C.F.R. § 42.4(a).

### A. Related Matter: Case IPR2013-00364

Several months prior to filing this petition, Petitioner filed a petition for *inter partes* review of claims 1-34 of the '446 patent. *Handi Quilter, Inc. v. Bernina Int'l AG*, Case IPR2013-00364, Paper 1 ("364 Petition"). On November 11, 2013, the Board instituted *inter partes* review of claims 1, 2, 5-7, 10, 12, 13, 17-21, 23-29, 31, 33, and 34. *Handi Quilter, Inc. v. Bernina Int'l AG*, Case IPR2013-00364 (PTAB Nov. 11, 2013) (Paper 12) ("364 Decision"). Specifically, the Board determined that Petitioner had shown a reasonable likelihood of proving that claims 1, 2, 5-7, 10, 12, 13, 17-21, 23-29, 31, 33, and 34 are anticipated by Watabe, and that claims 1, 2, 5-7, and 23-27 would have been obvious over Watabe and Reed.

Patent Owner has asserted the '446 patent in separate lawsuits against each of the petitioners as follows: *Bernina International AG v. Handi Quilter, Inc.*, Case No. 2:12-cv-07079-JD (E.D. Pa.) and *Bernina International AG v. Tacony Corporation*, Case No. 2:13-cv-01787-JD (E.D. Pa.). Pet. 1; Patent Owner Mandatory Notices 1-2 (Paper 5).

B. The Asserted Grounds

Petitioner presents, in this petition, the following grounds of unpatentability:

References	Basis	Claims challenged
Watabe (Ex. 1004) <sup>1</sup>	§ 102	8, 9, 11, 14-16, 22, and 32
Watabe	§ 103	8, 9, 11, 14-16, 22, and 32
Watabe and Gordon (Ex. 1015) <sup>2</sup>	§ 103	8, 9, 11, 14-16, 22, and 32

### C. The '446 Patent

The '446 patent relates "to a method and apparatus for stitching together two or more fabric layers, as in quilting." Ex. 1001, col. 1, ll. 11-12. The technology of the '446 patent is described in detail in the 364 Decision at pages 3-5. For the purposes of this decision, we adopt that prior description.

#### D. Illustrative Claims

All eight of the challenged claims are dependent. Claims 8 and 9 depend from claim 1. Claims 1, 8, and 9 illustrate the subject matter at issue and are reproduced, with emphases added, as follows:

<sup>&</sup>lt;sup>1</sup> Japanese Published Patent Application No. 2002/292175 (Oct. 8, 2002). Petitioner submitted the Japanese language reference (Ex. 1006) as well as a translation (Ex. 1004).

<sup>&</sup>lt;sup>2</sup> U.S. Patent No. 6,281,882 (Aug. 28, 2001).

1. An apparatus for stitching together two or more stacked planar layers, said apparatus including:

a stitch head mounted at a fixed location and actuatable to insert a stitch through a stack of two or more planar layers located beneath said stitch head;

a substantially horizontally oriented bed for supporting said stack of planar layers for manually guided movement across said bed beneath said stitch head;

detector means for detecting movement of a surface of said stack oriented parallel to said bed and proximate to said stitch head for producing signals representing the magnitude of stack surface movement; and

control circuit means responsive to said signals indicating stack surface movement exceeding a certain threshold for actuating said stitch head to insert a stitch through said stack.

8. The apparatus of claim 1 *wherein said detector means includes a light source for illuminating said stack surface*; and

means for processing light reflected from said illuminated stack surface for determining the magnitude of movement of said stack surface.

9. The apparatus of claim 1 wherein said detector means includes optical means for measuring movement of said stack surface along orthogonal X and Y axes; and

signal processing means responsive to said measured movement for determining the magnitude of resultant movement of said stack; and wherein

said control circuit means actuates said stitch head when the magnitude of said resultant movement exceeds a predetermined stitch length.

### II. ANALYSIS

#### A. Claim Construction

For the purposes of determining whether to institute an *inter partes* review in the 364 Decision, we construed several terms of the '446 patent at pages 6-13. Petitioner proposes that these same constructions be used for purposes of this decision. Pet. 6-12. Patent Owner notes that it does not agree with these definitions, but does not propose any alternative definitions. Prelim. Resp. 3. Instead, Patent Owner asserts that "a construction of these terms is unnecessary for the purpose of [the] Preliminary Response." *Id.* at 4. For the reasons set forth in the 364 Decision, we adopt, for purposes of this decision, the constructions set forth in pages 6-13 of the 364 Decision.

# B. The Watabe Reference

Watabe, disclosing a sewing machine, is a reference relied upon in each of Petitioner's proposed grounds for review. The technology referred to in Watabe is described in the 364 Decision at pages 13-15. For the purposes of this decision, we adopt that prior description.

# C. Anticipation by Watabe

Petitioner asserts that claims 8, 9, 11, 14-16, 22, and 32 are anticipated by Watabe. Pet. 5-6, 29-45. Claims 8 and 9 depend from claim 1; claims 11 and 14-16 depend from claim 10; claim 22 depends from claim 21; and claim 32 depends from claim 31. In the 364 Decision, we determined that Petitioner demonstrated a reasonable likelihood of proving that independent claims 1, 10, 21, and 31 are

anticipated by Watabe. 364 Decision 16-18. For the reasons set forth in the 364 Decision, we are persuaded, for purposes of this decision, that Watabe discloses each of the limitations recited by independent claims 1, 10, 21, and 31.

## 1. Dependent Claims 8, 14, 15, and 22

Dependent claims 8, 14, 15, and 22 include limitations directed to a light source or energy source as part of a detector ("the light source limitation"). For example, claim 8 recites that "detector means includes a light source for illuminating said stack surface." In the 364 Decision, we determined that Petitioner had not demonstrated sufficiently that this limitation was inherent to the image sensor of Watabe. *Id.* at 18. In this petition, Petitioner relies on the testimony of a declarant, Gary J. Konzak (Ex. 1017), for the assertion that a person of ordinary skill would have had two reasons to understand that "[a]t least one embodiment of the motion detector of Watabe necessarily includes a light source." Pet. 36-40 (citing Ex. 1017 ¶¶ 22-24).

We agree with Patent Owner that Petitioner has not demonstrated sufficiently that the light source limitation is inherent to the disclosure of Watabe. Inherency can be established when "prior art necessarily functions in accordance with, or includes, the claimed limitations." *In re Cruciferous Sprout Litig.*, 301 F.3d 1343, 1349 (Fed. Cir. 2002). "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *In re Oelrich*, 666 F.2d 578, 581 (CCPA 1981). Here, Petitioner's two theories of inherency are both premised on a mere possibility. The first theory rests on what most readily would come to the

mind of a person of ordinary skill when reading Watabe's disclosure. The second theory rests on where an image sensor "may be attached." Neither explanation shows that the light source limitation inevitably results from the disclosed steps.

Moreover, Mr. Konzak, in rendering his opinion, pointed to no underlying factual support for the assertions upon which he bases his conclusion. *See* 37 C.F.R. § 41.65(a) ("Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight."). Petitioner, therefore, has not demonstrated a reasonable likelihood that it would prevail with respect to claims 8, 14, 15, and 22 as anticipated by Watabe.

## 2. Dependent Claims 9, 11, 16, and 32

Dependent claims 9, 11, 16, and 32 include limitations directed to detecting or measuring movement in multiple, orthogonal directions ("the measuring movement limitation"). For example, claim 11 recites that the "detector operates to produce X and Y signals respectively representing the magnitude of translational movement of said fabric layer surface along perpendicular X and Y axes." In the 364 Decision, we determined that Petitioner had not demonstrated sufficiently that this limitation was disclosed by Watabe. *Id.* at 18. In this petition, Petitioner relies on the testimony of Mr. Konzak for the assertion that a person of ordinary skill would have had several reasons to understand that "[a]t least one embodiment of the motion detector of Watabe necessarily functions to detect and measure movement in multiple, orthogonal directions." Pet. 40-45 (citing Ex. 1017 ¶¶ 25-30).

We agree with Patent Owner that Petitioner has not demonstrated sufficiently that this limitation is inherent to the disclosure of Watabe. Similar to its theory of inherency for the light source limitation, at least one of Petitioner's theories here is premised on what readily would come to the mind of a person of ordinary skill when reading Watabe's disclosure. Pet. 41. Its other theories of inherency rest on unsubstantiated assertions by Mr. Konzak, such as his assertion that "there was only one way to detect and measure movement using image correlation technology" at the time of the invention. Pet. 41-44 (citing Ex. 1017 ¶¶27-29). Mr. Konzak's broad assertions, including no explanation of the facts upon which they are based and no evidentiary support, are not persuasive. Petitioner, therefore, has not demonstrated a reasonable likelihood that it would prevail with respect to claims 9, 11, 16, and 32 as anticipated by Watabe.

### D. Obviousness Grounds

Petitioner alleges two grounds of obviousness based on Watabe: alone or in view of Gordon. Pet. 45-50.

### 1. Obviousness over Watabe

Petitioner asserts that Watabe renders claims 8, 9, 11, 14-16, 22, and 32 unpatentable because a person of ordinary skill in the art would have found it obvious to modify Watabe to incorporate the image correlation technology that was well known and in use at that time. Pet. 27-28 (citation omitted). Petitioner presents two bases for this conclusion. First, a person of ordinary skill would have knowledge of the required components and algorithms for image correlation, and would have been able to modify Watabe to include these features. Pet. 48 (citing

Ex.  $1017 \, \P \, 18$ ). Second, a person of ordinary skill "would have had few, if any, choices for motion detection using optical sensors" and "every motion detector relying on an optical image sensor and microcomputer available" during the relevant time period included features meeting both the light source and measuring movement limitations. *Id.* at 48-49 (citing Ex.  $1017 \, \P \, 41$ ).

We are not persuaded by Petitioner's arguments. First, although Petitioner argues that a person of ordinary skill *could* have modified Watabe to include features meeting the light source and measuring movement limitations, Petitioner does not explain persuasively *why* a person of ordinary skill would do so. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) ("Often, it will be necessary for a court to . . . determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue."). We are not persuaded that Petitioner has shown that the claimed subject matter involved "a simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement." *Id.* at 417. Further, as discussed above, we do not find persuasive the broad, unsubstantiated assertion that during the relevant time period "every motion detector relying on an optical image sensor" included features meeting both the light source and measuring movement limitations. Pet. at 48 (citing Ex. 1017 ¶ 41).

We are not persuaded that Petitioner has demonstrated a reasonable likelihood that it would prevail on the ground that claims 8, 9, 11, 14-16, 22, and 32 are unpatentable as obvious over Watabe.

### 2. Obviousness over Watabe and Gordon

Petitioner asserts that Watabe in view of Gordon renders claims 8, 9, 11, 14-16, 22, and 32 unpatentable. Gordon is a patent describing a "proximity detector for a seeing eye mouse." Ex. 1015. Petitioner relies on the optical image sensor described by Gordon to meet the light source and measuring movement limitations recited by the challenged claims. Pet. 25-29.

Petitioner, however, does not provide a persuasive rationale for why a person of ordinary skill in the art would modify Watabe to incorporate the optical image sensor described by Gordon. Petitioner asserts Watabe's statement that "because the method for measuring the distance by which the fabric is fed uses a known method, detailed explanations thereof will be omitted," would provide a reason for a person of ordinary skill to combine the sewing machine of Watabe with the optical motion detector of Gordon. Pet. 49-50 (citing Ex. 1017 ¶ 39). Petitioner also states that "both references discuss the same type of image sensing and processing; *Gordon* simply discloses it in more detail." *Id.* at 50 (citing Ex. 1017 ¶ 40). Thus, according to Petitioner, a person of ordinary skill would have "appreciated that the Gordon optical sensor could easily have been substituted for the Watabe optical sensor." *Id.* 

This argument suffers from the same problems as the arguments related to obviousness over Watabe alone. Petitioner focuses its argument on explaining that a person of ordinary skill *could* have modified Watabe to include the optical motion detector of Gordon, but Petitioner does not explain persuasively *why* a person of ordinary skill would do so. In addition, Petitioner's argument is based

on the testimony of Mr. Konzak, which, for the reasons discussed above, we do not find persuasive.

We are not persuaded that Petitioner has demonstrated a reasonable likelihood that it would prevail on the ground that claims 8, 9, 11, 14-16, 22, and 32 are unpatentable as obvious over Watabe and Gordon.

### III. CONCLUSION

Upon consideration of the petition and preliminary response, we are not persuaded that there is a reasonable likelihood that Petitioner would prevail on at least one alleged ground of unpatentability raised in this petition. We, therefore, deny the petition for *inter partes* review and do not institute trial on any of the asserted grounds as to any of the challenged claims. 35 U.S.C. § 314(a); 37 C.F.R. § 42.108(c).

### IV. ORDER

Accordingly, it is

ORDERED that the petition is denied and no trial is instituted.

Case IPR2014-00270 Patent 6,883,446 B2

## PETITIONER:

R. Parrish Freeman
Chad E. Nydegger
WORKMAN | NYDEGGER
pfreeman@wnlaw.com
cnydegger@wnlaw.com

## PATENT OWNER:

Anthony S. Volpe Ryan W. O'Donnell VOLPE AND KOENIG, P.C. avolpe@vklaw.com rodonnell@vklaw.com