



Section 102 and 103 Rejections Affirmed. *PCT International Inc. v. Amphenol Corporation*, IPR2013-00229, Paper 30 (PTAB September 11, 2014) (PTAB held claims were unpatentable over reference in view of common knowledge of a creative skilled artisan); *Handi Quilter, Inc. and Tacony Corporation v. Bernina International AG*, IPR2013-00364, Paper 39 (PTAB September 25, 2014) (claims found to be unpatentable)

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I. INTRODUCTION

This article focuses on two final written decisions issued in 2014 by the Patent Trial and Appeal Board.¹ In each proceeding, the petitioner mounted successful unpatentability challenges against the claims at issue. The two decisions highlight the contours of successful petitioner practice in front of the Board.

In *PCT International*,² the Board held that reasons to modify a prior art reference to render a claim obvious need not be taught explicitly in the prior art. Instead, those reasons may come from the knowledge of one of skill in the art at the time of the invention. Thus, the combination of a primary prior art reference with the knowledge of a person of ordinary skill in the art is sufficient to render a claim obvious. In *PCT International*, the petitioner made an evidentiary showing of the knowledge of one of skill in the art through expert testimony.

¹ Hereafter “PTAB” or “Board.”

² *PCT Int’l. Inc. v. Amphenol Corp.*, IPR2013-00229, Paper 30 (PTAB Sept. 11, 2014).

In *Handi Quilter*,³ the Board concluded that primary and secondary prior art references need not be shown to be physically combinable to render a claim obvious. Such is the case when the secondary reference provides an express teaching to the person of ordinary skill in the art that the primary reference can be used in the manner described in the secondary reference. The petitioner in *Handi Quilter* made this evidentiary showing without reliance on expert testimony.

II. FINAL WRITTEN DECISIONS FROM THE PTAB

The first petition for *inter partes* review (“IPR”) was filed on September 16, 2012 and the Board issued a final written decision on that petition on November 13, 2013.⁴ Since then, the Board has issued 322 final IPR decisions—130 in 2014 and an additional 192 so far in 2015.⁵ With this substantial body of IPR “case law” now in place, it is possible to look back and analyze the petitioner strategies that have proven successful in front of the Board. The two decisions discussed here are in the mechanical arts, but the underpinnings of the unpatentability arguments advanced by each of the petitioners may be applicable across a spectrum of technology fields.

A. *PCT International v. Amphenol Corporation*

In *PCT International*, the petitioner challenged the claims of U.S. Patent No. 7,544,094 (the “’094 Patent”) directed to a connector assembly with a sleeve that facilitates gripping and mating of a

³ *Handi Quilter, Inc. and Tacony Corp. v. Bernina Int’l AG*, IPR2013-00364, Paper 39 (PTAB Sept. 25, 2014)

⁴ *Garmin Int’l, Inc., et al. v. Cuozzo Speed Techs. LLC*, IPR2012-00001.

⁵ See U.S. Patent Office IPR Statistics through April 9, 2015 at http://www.uspto.gov/sites/default/files/documents/040915_aia_stat_graph.pdf (last visited Apr. 16, 2015).

connector to a counterpart threaded structure.⁶ The petitioner challenged the claims on grounds of anticipation and obviousness relying both on printed publications as well as the knowledge of a person of ordinary skill in the art.

According to the '094 Patent, the claimed invention solved the problem of loose connections that result from a poor grip. The '094 Patent purportedly solved this problem with a sleeve that encases the connector and permits a user to achieve high levels of torque when mating the connector to a corresponding structure (without the use of tools).⁷ The independent claims of the '094 Patent recited a connector assembly comprising three key elements: 1) an *electrical connector* having a rotatable end configured to couple to a mating connector; 2) a *sleeve* having an outer gripping surface and an inner bore; and 3) the inner bore including a *retaining member* to prevent axial movement of the electrical connector.⁸ In its analysis of the prior art and the arguments presented by the parties, the Board found that the independent claims and several dependent claims of the '094 Patent were anticipated by a prior art patent to Smith, and that *all* of the petitioned claims were rendered obvious over a prior art patent to Burris and the knowledge of a person of ordinary skill in the art, or by the combination of Burris and Smith.

In considering the petitioner's unpatentability challenges, the Board explained that a showing of anticipation requires that a single prior art reference disclose each and every element of the claimed invention.⁹ With respect to obviousness, the Board stated that the differences between the claimed subject matter and the prior art must be such that the subject matter, as a whole, would have been obvious to a person having ordinary skill in the art at the time of the invention.¹⁰ Furthermore, in the obviousness context, prior art references must be

considered together with the knowledge of one of skill in the pertinent art taking into account not only specific teachings of the references, but also inferences from which one skilled in the art would reasonably be expected to draw. As such, an obviousness analysis need not seek out precise teachings directed to specific subject matter, but can take into account inferences and creative steps that a person of ordinary skill in the art would employ.¹¹

In its final written decision, the Board found that the Smith reference disclosed a torque wrench installed on an electrical cable connector for fastening the connector to a counterpart structure. The Board also concluded that the wrench included an aft section configured to prevent the connector's movement through the wrench by restricting the size of the hollow interior of the wrench. The main challenge to the Smith reference by the patent owner focused on the "sleeve" limitation. According to the patent owner's expert, a wrench is not a sleeve. The Board, however, rejected that argument and concluded that whether the Smith wrench is an accessory or not was irrelevant to the analysis of whether the Smith reference disclosed the "sleeve" limitation. According to the Board, the focus of the inquiry was properly on the structure and function of Smith's disclosed device and not on the label put on it.¹²

With respect to the obviousness grounds advanced by the petitioner in view of Burris and the knowledge of a person of skill in the art, the Board concluded that such combination rendered the petitioned claims obvious. The Board described Burris as being directed to a coaxial connector torque aid (in the form of a tubular grip element) installed over a conventional coaxial connector to facilitate tightening, by hand, of the connector onto an equipment port. The Board found that Burris taught all the recited limitations in the independent claims of the '094 Patent except for the "retaining member." In determining that modifying Burris would allow one to arrive at the claimed invention, the Board relied on the testimony of the petitioner's

⁶ IPR2013-00229, Paper 30 (Final Written Decision) at p. 3.

⁷ *Id.* at pp. 3-4.

⁸ *Id.* at p. 5.

⁹ *Id.* at p. 9 (citing *Schering Corp. v. Geneva Pharm.*, 339 F.3d 1373, 1377 (Fed. Cir. 2003)).

¹⁰ *Id.* (citing *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007)).

¹¹ *Id.* at p. 10 (citing *KSR*, 550 U.S. at 418).

¹² *Id.* at p. 16.

expert. The petitioner’s expert explained that a known problem of losing parts of a connector would have motivated a person of ordinary skill in the art to look for a solution and that a person of ordinary skill in the art would recognize that one solution was to adapt a rib feature such as the one disclosed in Burris.

In determining whether a person of ordinary skill in the art would have been motivated to configure the rib structure of Burris to retain or to prevent axial movement, the Board concluded that it had to consider not only what the art taught, but also the inferences that may be drawn by a person of skill in the art with creativity.¹³ In this regard, the Board was persuaded by the evidence presented by the petitioner. Specifically, the Board found that it would have been in the course of creative application of known techniques and mechanical elements to arrive at a Burris tubular grip that included a retaining member for retaining the electrical connection or for preventing axial movement. The Board thus found that the petitioned claims were obvious in view of Burris and the knowledge of one skilled in the art at the time of the invention.¹⁴

B. *Handi Quilter v. Bernina International*

The patent at issue in *Handi Quilter* (U.S. Patent 6,883,446, the “’446 Patent”) related to automatic stitch regulation with a sewing machine. According to the parties’ submissions, this technology is used in the sewing and quilting arts for producing precise and consistent stitches that are closely and uniformly spaced. Prior art stitch regulation generally involved the use of a large frame to allow the movement of fabric to be detected. In its petition for IPR, the petitioner argued that the ’446 Patent essentially removed the frame and relied instead on an optical sensor to directly detect fabric

movement.¹⁵ According to the petitioner, this combination of sewing machine and sensor was identical to that disclosed in “Watabe,” a prior art Japanese publication that had not been considered by the Office during prosecution of the ’446 Patent.

The petitioner relied on Watabe as its primary reference to argue that all 34 claims under review were unpatentable. In its petition, the petitioner further argued that to the extent Watabe did not wholly anticipate all of the petitioned claims, it was only because Watabe did not engage in a detailed discussion of things already known in the art, such as the internal mechanics of a sewing machine or the inner workings of the optical sensor disclosed in Watabe. According to the petitioner, even if not deemed to be anticipatory, Watabe nonetheless rendered those claims obvious either alone—because the missing elements were known by persons of skill in the art at the time of the invention—or, alternatively, in view of various secondary references that disclosed those elements.¹⁶

One of the arguably missing elements in Watabe related to the claim limitation requiring the stitching of “two or more stacked planar layers of fabric.” In the sewing and quilting arts, it is understood that quilting involves two or more layers of fabric while normal sewing only involves one layer of fabric. Thus, if the claims of the ’446 Patent were interpreted to be directed to quilting—as opposed to quilting *and* sewing—Watabe would arguably be missing this “multiple-layer” claim limitation.¹⁷ To address this point, the petitioner pointed out in its petition that to the extent Watabe did not inherently disclose layers of fabric, or rendered layers obvious, a secondary reference, Reed, demonstrated that use of a sewing machine on multiple layers of fabric was known at the time of the invention. In response, the patent owner challenged the inherency arguments advanced by the petitioner and in particular noted that there was nothing in the petition explaining why one considering Reed

¹³ *Id.* at p. 21 citing *KSR*, 550 U.S. at 418 (“One of ordinary skill in the art need not see the identical problem addressed in a prior art reference to be motivated to apply its teachings.”).

¹⁴ The Board also found the claims obvious in view of Burris and Smith. *Id.* at p. 28.

¹⁵ IPR2013-00364, Paper 1 (Petition) at p. 12.

¹⁶ *Id.* at p. 18

¹⁷ *Id.* at p. 20.

would look at Watabe for quilting. The patent owner further argued that the petitioner’s proposed combination merely provided a list of theoretically combinable components without presenting a reasoned analysis of why they could or would be combined.¹⁸

In its decision to institute, the Board agreed with the petitioner’s argument of inherent anticipation by Watabe and also with the obviousness argument of Watabe in view of Reed. In its decision, the Board explained that—contrary to the patent owner’s argument—the petitioner did not propose modifying the Watabe sewing machine in view of Reed, but instead, the petitioner relied on Reed only as providing an express teaching to the person of ordinary skill in the art that the Watabe sewing machine could be used to stitch together multiple layers of fabric such as in quilting.¹⁹ The Board instituted review of 23 of the 34 claims petitioned, including all the independent claims of the ’446 Patent.²⁰

In its final decision, the Board held unpatentable all 23 claims on which it instituted the IPR.²¹ In siding with the petitioner, the Board explained that the patent owner had argued against the petitioner’s obviousness ground by asserting that Reed and Watabe were not combinable because Reed was an older reference that purportedly taught the use of a movable sewing machine and hand controls for stitching in free-hand quilting. But the Board found that the patent owner’s arguments were not responsive to the petitioner’s application of Watabe and Reed to the claims. According to the Board, the petitioner had not argued for physically combining

the Watabe and Reed prior-art-machines or for modifying either of them in view of the other. Instead, the Board concluded that the petitioner relied on Reed for providing an express teaching to the person of ordinary skill in the art that the Watabe prior-art-sewing-machine could be used to stitch together multiple layers of fabric and that, as such, the claims under review were obvious.

III. STRATEGIC CONSIDERATIONS

PCT International and *Handi Quilter* provide examples of unpatentability challenges in which the petitioner proved by a preponderance of the evidence that the petitioned claims were anticipated or obvious. The decisions highlight two successful, yet distinct, strategies for challenging patent claims, particularly under an obviousness framework.

In *PCT International*, the Board was persuaded that the petitioned claims were unpatentable in light of a primary prior art reference and the knowledge of a person of ordinary skill in the art. Evidence of that knowledge was presented to the Board in the form of expert testimony.

By contrast, in *Handi Quilter*, the Board concluded that the challenged claims were unpatentable without reliance on expert testimony. Specifically, the Board determined that an unpatentability challenge based on a secondary reference that provided an express teaching—relative to a primary reference—did not require that the petitioner show that the prior art references were physically combinable. Such was the case because the secondary prior art reference provided an express teaching that the machine of the primary prior art reference could be used in the manner claimed in the patent under review.

¹⁸ *Id.*, Paper 9 (Patent Owner’s Preliminary Response) at p. 27.

¹⁹ *Id.*, Paper 12 (Decision on Institution of IPR, Nov. 5, 2013) at pp. 20-21.

²⁰ On December 18, 2013, the petitioner filed a second petition seeking review of claims that were not instituted for review in the first instance. This second petition was instituted on all requested claims on December 30, 2014. *See* IPR2014-00270, Paper 17.

²¹ The Board’s final decision has been appealed to the Federal Circuit on the issue of whether the claims at issue were entitled to an earlier priority date than Watabe. That appeal is currently pending.