

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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SQUARE, INC.,  
Petitioner,

v.

REM HOLDINGS 3, LLC,  
Patent Owner.

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Case IPR2014-00312  
Patent 8,584,946 B2

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Before DENISE M. POTHIER, JENNIFER S. BISK, and  
PATRICK R. SCANLON, *Administrative Patent Judges*.

BISK, *Administrative Patent Judge*.

DECISION  
Request for Rehearing  
*37 C.F.R. § 42.71(d)*

## I. INTRODUCTION

Petitioner, Square, Inc., filed a request for rehearing (Paper 62, “Req. Reh’g” or “Request”) of our Final Decision (Paper 58, “Final Dec.”). Patent Owner filed an opposition to Patent Owner’s Request. Paper 64 (“Opp.”). Petitioner filed a reply in support of its Request. Paper 66 (“Reply”).

In our Final Decision, we concluded that Petitioner had demonstrated, by a preponderance of the evidence, that claims 1, 2, 6, 7, and 10–17 of U.S. Patent No. 8,584,946 B2 (“the ’946 patent”) are unpatentable. Final Dec. 38. We found that Petitioner had *not* demonstrated, by a preponderance of the evidence, that claims 3–5, 8, and 9 of the ’946 patent are unpatentable. *Id.* Petitioner requests rehearing as to our holding that Petitioner has not demonstrated that claims 3–5, 8, and 9 are unpatentable. Req. Reh’g 1.

For reasons that follow, we *grant* Petitioner’s Request for Rehearing with respect to claims 4 and 9, but *deny* the Request with respect to claims 3, 5, and 8. We modify our analysis in determining that Petitioner has demonstrated by a preponderance of the evidence that claims 4 and 9 of the ’946 patent would have been obvious over the combination of Lekernel,<sup>1</sup> Padilla,<sup>2</sup> and Odagiri.<sup>3</sup>

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<sup>1</sup> Sébastien Bourdeauducq, *Reading Magnetic Cards (Almost) for Free* 1–2 (January 26, 2009), available at <http://lekernel.net/blog/2009/01/reading-magnetic-cards-almost-for-free> (“Lekernel”) (Ex. 1009).

<sup>2</sup> Luis Padilla Visdómine, *Turning Your Mobile Into a Magnetic Stripe Reader* 1–4 (2007), available at <http://classic-web.archive.org/web/20041027001715/http://www.gae.ucm.es/~padilla/extrawork/mobilesoundtrack.html> (“Padilla”) (Ex. 1010).

## II. ANALYSIS

### A. Background

Petitioner in this case challenged claims 1–17 of the '946 patent based on the following five obviousness grounds:

References	Challenged Claims
Lekernel and Padilla	1–3, 6–8, 15, and 16
Lekernel, Padilla, and Odagiri	4 and 9
Lekernel, Padilla, and Wallner <sup>4</sup>	5, 10–14, and 17
Tang <sup>5</sup> and BPS <sup>6</sup>	1–3, 5–8, and 10–17
Tang, BPS, and Odagiri	4 and 9

Paper 1 (“Pet.”). We instituted *inter partes* review on all the challenged claims and all the asserted grounds except that we did *not* institute trial on claims 3 and 8 on the ground that they were obvious over Lekernel and Padilla. Paper 12 (“Inst. Dec.”) 27. We agreed with Patent Owner that, for this ground, the Petition referred only to Lekernel’s Figure 3 for a teaching the limitation “the read head and said one or more resistors are contained within a housing”<sup>7</sup> (“the enclosed housing limitation”), and we were not persuaded that Lerkernel taught that limitation. Inst. Dec. 17–19.

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<sup>3</sup> US 2004/0041911 A1, published Mar. 4, 2004 (“Odagiri”) (Ex. 1014).

<sup>4</sup> US 2010/0243732 A1 (published Sept 5, 2010) (“Wallner”) (Ex. 1011).

<sup>5</sup> US 8,281,998 B2 (issued Oct. 9, 2012 and claiming priority to Provisional App. No. 61/151,459, filed Feb. 10, 2009) (“Tang”) (Ex. 1006).

<sup>6</sup> JP 3008764B (published Dec. 28, 1994) (Ex. 1008) (“BPS”) (an English translation begins on page 8 of the exhibit).

<sup>7</sup> This is the language recited by claim 3. Claim 8 similarly recites “the read head and said one or more resistors are included in a housing.”

In the Final Decision, we concluded that Petitioner had not demonstrated, by a preponderance of the evidence, that claims 1–17 were unpatentable over Tang and BPS alone or in combination with Odagiri. Final Dec. 33–34. Petitioner has not requested rehearing on this portion of the Final Decision. *See* Req. Reh’g.

We also concluded that Petitioner had not demonstrated, by a preponderance of the evidence, that claims 4 and 9 were obvious over Lekernel, Padilla, and Odagiri or that claim 5 was obvious over Lekernel, Padilla, and Wallner. Final Dec. 38. As mentioned above, we did not institute *inter partes* review on claims 3 and 8 over the only asserted ground challenging these claims remaining after our conclusion on the Tang/BPS grounds—obviousness over Lekernel and Padilla. The Final Decision, therefore, found only claims 1, 2, 6, 7, and 10–17 of the ’946 patent to be unpatentable. *Id.*

#### *B. Burden on Request for Rehearing*

According to 37 C.F.R. § 42.71(d), “[t]he burden of showing a decision should be modified lies with the party challenging the decision” and the “request must specifically identify all matters the party believes the Board misapprehended or overlooked.” The burden here, therefore, lies with Petitioner to show we misapprehended or overlooked the matters it requests that we review.

#### *C. Claims 4 and 9*

In our Final Decision, we noted that “[f]or the very first time at oral hearing, Patent Owner addressed the dependency of claims 4 and 9 to claims 3 and 8 respectively” arguing that “because we did not institute review for claims 3 and 8 based on Lekernel and Padilla, we should not have instituted review of dependent

claims 4 and 9 based on Lekernel, Padilla, and Odagiri.” Final Dec. 31. We also agreed with Patent Owner that “the grounds for instituting review of claims 4 and 9 did not rely on Odagiri to teach the concept of the resistors and read head contained within a housing” because the Petition “relied on Lekernel for this feature in claim 3 and turns to Odagiri to teach the output plug extends out the housing as recited in claim 4.” *Id.* at 31–32 (citing Pet. 25, 27). Although we agreed with Petitioner that Odagiri also teaches a housing for enclosing components, we concluded that we were constrained by “insufficient facts in the record to support that claims 4 and 9 are unpatentable over Lekernel, Padilla, and Odagiri as proposed by Petitioner.” *Id.* at 32.

Petitioner argues that the Board overlooked or misapprehended Petitioner’s independent discussion of the housing feature in Odagiri when addressing the limitations of claims 4 and 9, including the limitations in claims 3 and 8 respectively, from which claims 4 and 9 respectively depend. Req. Reh’g. 11–15. Petitioner explains that in the Petition’s claim chart for claims 4 and 9, “Petitioner notes that Lekernel and Padilla teach a housing, but goes on to explain that Odagiri *independently* teaches a housing.” *Id.* at 12. According to Petitioner, it “emphasized that this is an independent teaching of the feature of claim 3 by stating that Odagiri *also* illustrates the limitation of claim 4.” *Id.* Moreover, Petitioner asserts that the Petition “referred to and included Fig. 2 of Odagiri, which clearly illustrates a housing enclosing electronic components.” *Id.* Thus, Petitioner argues that the Board “incorrectly determined Petitioner did not rely on Odagiri to teach

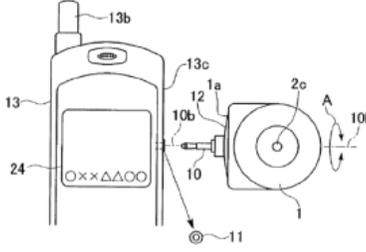
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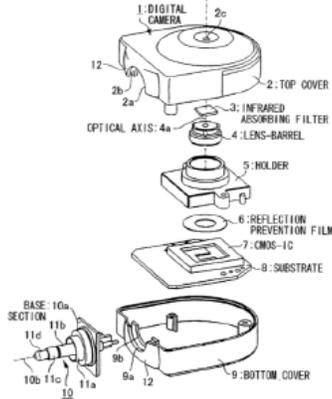
the enclosed housing limitation in addition to the limitations of claims 4 and 9.” *Id.* at 13.

Patent Owner argues that Petitioner did *not* independently rely on Odagiri to teach the enclosed housing limitation. Opp. 7. Although Patent Owner does not dispute that Odagiri illustrates a housing (*id.* at 7 n.2), Patent Owner contends that “[n]owhere in the petition does Petitioner ever state that Odagiri—alone or in combination with another reference—teaches the [housing limitation]” (*id.*). Patent Owner also argues, in a footnote, that Petitioner does not explain whether or how Lekernel and Odagiri could be combined to teach that “the read head and said one or more resistors are contained within” Odagiri’s housing. *Id.* at 7–8 n.2.

We agree that we overlooked the Petitioner’s reliance on Odagiri for the housing aspect of the enclosed housing limitation in the Petition. The import of this aspect of the Petition becomes clear, however, upon consideration of Petitioner’s Request.

Below is a reproduction of the Petition’s claim chart for claims 4 and 9.

U.S. Patent No. 8,584,946	Correspondence to Lekernel (Exh. 1009) in view of Padilla (Exh. 1010) and Odagiri (Exh. 1014)
<p>4. The card reader device of claim 3, wherein the output plug extends out of the housing of the card reader device.</p>	<p>The combination of Lekernel and Padilla teaches each of the features set forth in claim 3, from which claim 4 depends. <i>See</i> Section VI(A).</p> <p>Odagiri illustrates a “housing”: mound section 12 of a mobile phone peripheral. Exh. 1014 at Fig. 3 (below).</p> <p style="text-align: center;"><b>FIG. 3</b></p>  <p>Odagiri also illustrates and describes that “the output plug extends out of the housing”:</p> <p>plug 10 extends from mound section 12 which is “formed as a part of the upper and lower covers surrounding the plug 10.” <i>Id.</i> at ¶ 142 and Fig. 2.</p>

U.S. Patent No. 8,584,946	Correspondence to Lekernel (Exh. 1009) in view of Padilla (Exh. 1010) and Odagiri (Exh. 1014)
<p>9. The method of claim 8, wherein the output plug extends out of the housing of the card reader device.</p>	<p style="text-align: center;"><b>FIG. 2</b></p>  <p>The combination of Lekernel and Padilla teaches each of the features set forth in claim 8, from which claim 9 depends. <i>See</i> Section VI(A).</p> <p><i>See</i> analysis of claim 4.</p>

Pet. 29–30. The claim chart for claim 4 states that “Odagiri illustrates a ‘housing’:  
mound section 12 of a mobile phone peripheral. Exh. 1014 at Fig. 3 (below).” *Id.*  
at 29. We agree with Petitioner that we overlooked that this particular sentence  
reasonably implies that the housing in Odagiri may be referred to as teaching the  
housing portion of the enclosed housing limitation recited by claim 3. *Id.* We also  
agree that Odagiri Figure 2 reproduced following this statement in the claim chart  
quite clearly shows electronic components enclosed by this same housing. *Id.*  
Although described explicitly to demonstrate the limitation “the output plug extends  
out of the housing,” we find this Figure also clearly shows all electronic  
components enclosed in a housing. Because Figure 2 is contained in the same cell  
of the claim chart and follows the general statement about housing, we are  
persuaded that, Figure 2 also supports the enclosed housing limitation. We are,  
therefore, persuaded that the Petition relied on Odagiri independently for the  
enclosed housing limitation when it proposed that claims 4 and 9 were unpatentable  
based on the combination of Lekernel, Padilla, and Odagiri.

In its Response to the Petition, Patent Owner did not argue the patentability  
of claims 4 and 9 separately. Paper 32 (“PO Resp.”). In fact, the only argument  
relating to Odagiri in the Response is that Odagiri does “not teach or suggest the  
‘provide the attenuated read head signal to the cell phone’ limitation” and “[t]he  
Odagiri reference is only used for the ‘housing’ limitations of dependent Claims 4  
and 9.” PO Resp. 29. In its Opposition to the Request for Rehearing, however,  
Patent Owner appears to argue that Petitioner has not shown that a person of

ordinary skill would combine the housing of Odagiri to enclose the read head and said one or more resistors taught by the other references. Opp. at 7–8 n.2.

We are persuaded that Petitioner has shown by a preponderance of the evidence that a person of ordinary skill in the art would have found this combination obvious. The Petition explains that it would have been obvious to combine Lekernel and Padilla with Odagiri because the combination is simply a design choice that has been made in a variety of related contexts for the benefit of reducing the number and cost of physical components, eliminating signal degradation, and increasing portability. Pet. 28–29; Ex. 1015 ¶ 45. Although this explanation explicitly relates to using Odagiri’s output plug in place of a cable, it is clear that this modification also may encompass placing the electronic components inside Odagiri’s housing. *KSR Int’l Co. v Teleflex Inc.*, 550 U.S. 398, 417 (2007) (“When a work is available in one field, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability.”). Moreover, Petitioner’s expert testifies that “[f]or decades, it has been standard practice in electronics design to use a housing to protect electronic components in order to protect electronic components in order to protect them from the elements, especially those incurred during use of the device in transit, as most portable devices are used.” Ex. 1015 ¶ 37 (cited to in the claim chart for claim 3 in Section VI(A) of the Petition, which in turn is referred to by the claim chart for claim 4 (Pet. 28)).

On the other hand, Patent Owner does not direct us to persuasive evidence that deciding where and how the electronic components of the claimed subject matter are housed was uniquely challenging or difficult for one of ordinary skill in the art. *See KSR*, 550 U.S. at 417 (“[I]f a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.”); *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1161 (Fed. Cir. 2007) (finding alleged invention obvious in view of what “common sense” would tell the skilled artisan). We are persuaded that the combination of Odagiri’s housing with the electronic components of Lekernel/Padilla is no “more than the predictable use of prior art elements according to their established functions.” *KSR*, 550 U.S. at 417. The preponderance of the evidence, thus, shows that an ordinary skilled artisan would have known to enclose the read head and one or more resistors taught by Lekernel and Padilla in the housing taught by Odagiri.

*D. Claim 5*

Petitioner says very little in its Request specifically about claim 5. The only explanation regarding Petitioner’s assertion that the Petition adequately demonstrated claim 5’s unpatentability over Lekernel, Padilla, and Wallner is made in a footnote that states: “As to claim 5, housing 120 of Wallner (Ex. 1011) is referenced (the internal circuitry of which is shown in Fig. 2a of this reference). This citation to Wallner is likewise an independent showing of the housing of claims 3 and 8.” Req. Reh’g 14 n.4.

We do not agree that we overlooked anything in the Petition with respect to claim 5. Below is a reproduction of the Petition’s claim chart for claim 5.

U.S. Patent No. 8,584,946	Correspondence to Lekernel (Exh. 1009) in view of Padilla (Exh. 1010) and Wallner (Exh. 1011)
5. The card reader device of claim 3, wherein the housing comprises a slot into which the card having the magnetic stripe may be inserted and swiped.	As discussed in Section VI(A), Lekernel and Padilla teach each of the features of claim 3, from which claim 5 depends.  Wallner states that “[t]he audio/acoustically coupled card reader 120 reads a magnetic stripe card 110 by swiping the card through the card reader slot 115.” Exh. 1011 at

U.S. Patent No. 8,584,946	Correspondence to Lekernel (Exh. 1009) in view of Padilla (Exh. 1010) and Wallner (Exh. 1011)
	¶ 19; see Exh. 1012 at Fig. 2, element 120.

Pet. 32–33. The claim chart for claim 5 does not refer to a housing in the right-hand column at all. With respect to Wallner, the claim chart simply states “Wallner states that ‘[t]he audio/acoustically coupled card reader 120 reads a magnetic stripe card 110 by swiping the card through the card reader slot 115.’ Exh. 1011 at ¶ 19; see Exh. 1012 at Fig. 2, element 120.” Figure 2 of Exhibit 1012 is reproduced below:

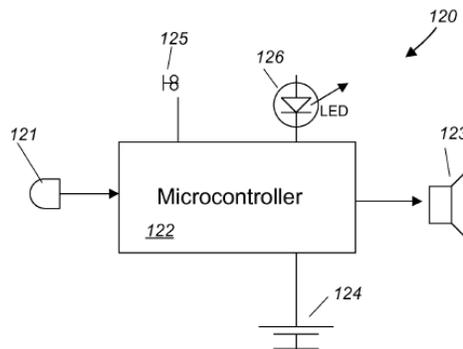


Figure 2 of Wallner shows a diagram including a circuit with microcontroller 122 and arrow 120 pointing to the entire circuit. It is unclear from this diagram how the circuit is enclosed. We find nothing in this claim chart, nor anywhere else in the Petition, that describes where the enclosed housing limitation is taught by Wallner. We are, thus, not persuaded that we misapprehended or overlooked anything in concluding that Petitioner has not demonstrated, by a preponderance of the evidence, that claim 5 is unpatentable over the combination of Lekernel, Padilla, and Wallner.

*E. Claims 3 and 8*

Petitioner argues that we should find claims 3 and 8 to be unpatentable for several reasons, including: (1) Dr. Morley, the named inventor of the '946 patent, has admitted in several places on the record that housings for containing electronic components are well known (Req. Reh'g 3–4); (2) Patentee's attorneys have represented to the USPTO, in other proceedings, that "housings were well known in the art" (*id.* at 4–6); and (3) the Board agrees that housings are well known (*id.* at 6). Petitioner does not point to where, in any of its papers prior to this request for hearing, it directed our attention to any of these alleged admissions. Because we could not have misapprehended or overlooked something not adequately explained in its papers, these are not appropriate arguments for a request for rehearing.

Petitioner also asserts that because it has always maintained that Odagiri independently discloses housings, meeting all limitations of claims 4 and 9, the Board is allowed under the statute, and expected in the public interest, to cancel claims 3 and 8 (*id.* at 14–15). Petitioner, however, does not point to any previous

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argument in any of its papers, where it made the argument that Odagiri is evidence of the knowledge that ordinary skilled artisans would have when reading Lekernel and Padilla. Instead, in the Petition, Odagiri was asserted as one of the pieces of prior art defining a combination for obviousness in combination with Lekernel and Padilla—solely for claims 4 and 9. Again, Petitioner’s new argument, that we may rely on Odagiri for the enclosed housing limitation no matter the combination-asserted references, is not appropriate for a request for rehearing.

Anticipating our conclusion that its new arguments are inappropriate, Petitioner urges that, even if we classify these arguments as made for the first time in the Request, we should waive the requirements of 37 C.F.R. § 42.71(d) in “the interests of justice” and “to prevent the Federal Circuit from being forced to reverse and remand this case.” *Id.* at 6–11. We decline Petitioner’s invitation to waive our rule. Even were we to consider Petitioner’s untimely arguments, we are not persuaded that claims 3 and 8 are properly subject to being found unpatentable based on Lekernel and Padilla given we explicitly did not institute *inter partes* review of these claims based on this ground. Inst. Dec. 17–18, 27; *see Office Patent Trial Practice Guide*, 77 Fed. Reg. 48,756, 48,757 (Aug. 14, 2012) (“Any claim or issue not included in the authorization for review is not part of the trial.”). Petitioner had a fair opportunity to file a request for rehearing of that decision in July of 2014. *See* 37 C.F.R. 42.71(d)(1) (“A party dissatisfied with a decision may file a request for rehearing, without prior authorization from the Board . . . (1) Within 14 days of the entry of a . . . decision to institute a trial as to at least one

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ground of unpatentability asserted in the petition.”). Petitioner did not file a request for rehearing of the Decision to Institute.

Instead, Petitioner cites to *Cuozzo* for the proposition that, regardless of our Decision to Institute, we “must” now rely on the independent teaching of Odagiri to hold claims 3 and 8 unpatentable. Req. Reh’g 14 (citing *In re Cuozzo Speed Technologies, LLC*, 793 F.3d 1268 (Fed. Cir. 2015)). According to Petitioner, the situation in this petition is exactly the same as in *Cuozzo*. Reply 3. We agree that in both cases a dependent claim is challenged on an obviousness ground and the question is whether the Board can, using the same ground, declare a broader claim from which the challenged claim depends unpatentable. In *Cuozzo*, the Federal Circuit stated that “it is at least beyond dispute there is no clear and indisputable right that precludes *institution* of the IPR proceeding” as to the unchallenged broader claims. *Cuozzo*, 793 F.3d at 1275 (emphasis added). In *Cuozzo*, the institution decision gave the patent owner notice that the independent claim was part of the trial, and the patent owner accordingly had a full opportunity to brief the issue. This case is the exact opposite situation. Here, the Decision to Institute explicitly stated that the issue of whether claims 3 and 8 are unpatentable over Lekernel and Padilla would *not* be at issue in the trial, leaving Patent Owner with no reason to address that issue in its briefing.

Although we agree with the proposition quoted by Petitioner that “a patentability challenge to a dependent claim implicitly involves a patentability challenge to the broader claims from which the dependent claim depends,” (Reply 3) we also are cognizant that this is an adversarial proceeding and our rules have

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been set up to respect procedural fairness. “Within this structure . . . Congress assigned to the challenger the burden of persuasion in the dispute. That burden, together with the procedural rules, impartially applied, means that, in some cases, a challenge can fail even if different evidence and arguments might have led to success.” *Ariosa Diagnostics v. Verinata Health, Inc.*, 2015 WL 7148267, at \*8 (Fed. Cir. Nov. 16, 2015). We decided upon reviewing the Petition that Petitioner had not shown properly where each element of claims 3 and 8 were found in the prior art patents or printed publications relied upon for the ground at issue. Inst. Dec. 17–18, 27; *see* 37 C.F.R. § 42.104(b)(4). Petitioner did not timely contest that Decision. We decline, at the last moments of this proceeding, to short circuit Patent Owner’s rights to a full and fair opportunity to respond by waiving our rules and declaring unpatentable claims based on a ground that explicitly was excluded from the *inter partes* review.

### III. ORDER

Accordingly, it is

ORDERED that the Request for Rehearing is *granted-in-part*;

FURTHER ORDERED that a preponderance of the evidence supports the conclusion that claims 4 and 9 of the ’496 patent are unpatentable;

FURTHER ORDERED that the Final Decision is modified to include our analysis herein regarding whether claims 4 and 9 would have been obvious over Lekernel, Padilla, and Odagiri; and

FURTHER ORDERED that the Request for Rehearing is *denied* as to claims 3, 5, and 8.

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