

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GARY J. FORD, MARK D. KILPATRICK,
JACK H. CROUSE and KENNETH L. HIXSON¹

Appeal 2008-4910
Application 10/898,254
Technology Center 3700

Decided: October 31, 2008

Before RICHARD E. SCHAFER, SALLY G. LANE and
JAMES T. MOORE, *Administrative Patent Judges*.

MOORE, *Administrative Patent Judge*.

DECISION ON APPEAL

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STATEMENT OF CASE

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The Appellants appeal under 35 U.S.C. § 134 (2002) from a final
rejection of claims 1-48. We have jurisdiction under 35 U.S.C. § 6(b)
(2002).

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The Appellants' claims are directed to a panel structure for a bowling
lane.

¹ The real party in interest is Qubicaamf Worldwide, LLC. (App. Br. 2).

1 Claims 1, 18 and 35 are the only independent claims in the
2 application.

3 Claim 1 reads as follows:

4 1. A panel structure for a bowling lane, comprising:
5 a lane panel having a first surface and a second surface, the first
6 surface forming a bowling surface of the bowling lane;
7 an underlayment adjacent the lane panel;
8 a tapered hole extending from the first surface of the lane
9 panel to the second surface of the lane panel, wherein the area
10 of the tapered hole is larger at the first surface than at the
11 second surface; and
12 a fastener having a head and a securing portion, the head
13 being disposed in the tapered hole and having a wall having a
14 taper at substantially the same angle as the tapered hole, the
15 securing portion extending from the head into the
16 underlayment.

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18 (App. Br. Appendix 41).

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20 Figure 3 from the Application, reproduced below, illustrates
21 one embodiment of claimed panel structure. (Specification p. 8, ¶
22 028).

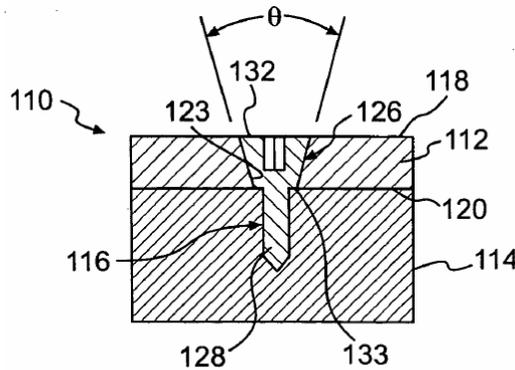


FIG. 3

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1 {Figure 3 shows a cross-sectional view of the panel
2 structure (Specification p. 8, ¶ 027).}

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4 THE EVIDENCE

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6 The Examiner relies upon the following as evidence in support of the
7 rejections:

8 Bowen	US 915,068	Mar. 16, 1909
9 Pasley	US 4,137,681	Feb. 06, 1979
10 Stirling	US RE 35,778	Apr. 28, 1998

11
12 THE REJECTIONS

13
14 The following rejections are before us for review:

- 15 1. Claims 1-10, 12-27, 29-44 and 46-48 stand rejected under 35 U.S.C. §
16 103(a) over the combination of Stirling (US Reissue Patent 35,778) and
17 Pasley (US Patent 4,137,681).
- 18 2. Claims 11, 28 and 45 stand rejected under 35 U.S.C. § 103(a) over the
19 combination of Stirling, Pasley and Bowen (US Patent 4,137,681).

20 We AFFIRM the rejections of claims 1-11, 12-43, and 45-48. We
21 enter a new ground of rejection under 35 U.S.C. § 103(a) over the
22 combination of Stirling, Pasley and Bowen for dependent claim 44.

23 ISSUE

24 Have the Appellants established that the Examiner erred in
25 determining that it would have been obvious to one of ordinary skill in the
26 art at the time the invention was made to combine a tapered sunk screw and
27 a tapered hole, both known elements of the prior art, to provide the claimed
28 panel structure for mounting a bowling lane to an underlayment?

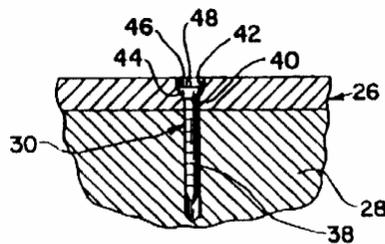
29 FINDINGS OF FACT

1 The record supports the following findings of fact by a preponderance
2 of the evidence.

3 1. Stirling describes an overlay structure for resurfacing a bowling
4 lane. (Stirling 2:18-20).

5 2. Stirling describes that the invention is directed to solving
6 problems related to repairing the surface of the wood lane that have become
7 worn and irregular. (Id. 1:23-29; 2:4-14).

8 3. Stirling Figure 2 , reproduced below, illustrates the fastening
9 means and overlay structure of the invention.



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Fig. 2

16 {Figure 2 shows a fragmented section of a mechanical fastening mechanism
17 (Id. 3:65-67).}

18 4. Stirling describes that the overlay structure 26 is generally
19 designed for covering, i.e., resurfacing an existing bowling lane. 28. (Id.
20 3:34-36).

21 5. Stirling describes that the structure includes the use of a fastening
22 means 30. (Id. 3:37-38).

23 6. Stirling describes that the fastening means 30 are in the form of
24 screws 38 extending through covering 26 and through the drilled holes 40
25 for securements to lane 28. (Id. 4:37-39).

1 7. Stirling also describes that the drilled holes 40 are countersunk, as
2 at 42, to accommodate the heads 44 of the screws in recesses 46 in the upper
3 surface of the sheet. (Id. 4:40-41).

4 8. Stirling describes that disc-shaped plugs 48 are inserted into
5 recesses 46 and provide an acceptable appearance and allow the use of many
6 fasteners. (Id. 4:43-53).

7 9. Pasley describes a fastening device for securing wear-resistant
8 tiles to a backing. (Pasley Title).

9 10. Pasley Figure 2, reproduced below, illustrates the fastening
10 devices of the invention.

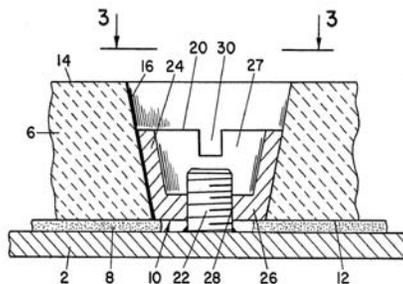


FIG. 2

11
12 {Figure 2 depicts a cross section of a fastening device.}

13 11. Pasley describes that the structure of the invention includes a
14 metal backing 2 and a lining 4 that covers the backing, which supports the
15 lining and maintains it in the desired configuration. (Id. 2:32-36).

16 12. Pasley describes that the tiles 6 may be set to a grout bed 8 to
17 level them. (2:40-41).

18 13. Pasley also describes that each tile 6 is retained in place by a
19 fastening device 10, that is attached directly to the backing 2. (Id. 2:43-45).

20 14. Pasley describes that the tile has a tapered hole 16 that is larger at
21 the front face 14 than at the back face 12. (Id. 2:56-58).

1 *Claim 1*

2 Claim 1 reads as follows:

- 3 1. A panel structure for a bowling lane, comprising:
4 a lane panel having a first surface and a second surface, the first
5 surface forming a bowling surface of the bowling lane;
6 an underlayment adjacent the lane panel;
7 a tapered hole extending from the first surface of the lane
8 panel to the second surface of the lane panel, wherein the area
9 of the tapered hole is larger at the first surface than at the
10 second surface; and
11 a fastener having a head and a securing portion, the head
12 being disposed in the tapered hole and having a wall having a
13 taper at substantially the same angle as the tapered hole, the
14 securing portion extending from the head into the
15 underlayment.

16
17 (App. Br. Appendix 41).

18
19 Initially, we analyze the claim, giving it the broadest reasonable
20 interpretation consistent with the specification. *In re Yamamoto*, 740
21 F.2d 1569, 1571 (Fed. Cir. 1984). Claim 1 requires a bowling lane
22 panel, an underlayment, a tapered hole, and a fastener with a tapered
23 head matching the tapered wall. The claim requires the hole to extend
24 through the lane panel. We find the term “tapered” read reasonably
25 broadly can mean either a portion of the hole wall, or the complete
26 hole wall, is tapered.

27 We now turn to the Examiner’s rejection.

28 The Examiner found that Stirling describes a bowling lane secured
29 with fasteners. (Non-Final Rejection, Jun. 6, 2006, p. 2, incorporated by
30 reference in Final Rejection, Nov. 14, 2006, p. 2). The Examiner also found

1 that “Pasley teaches that a common expedient in fasteners would have been
2 obvious to mount linings to backings.” (Id.). According to the Examiner,
3 Pasley describes a fastening expedient having a tapered hole 16 extending
4 from the first surface to a second surface, and a fastener 42 with a securing
5 portion 28. (Id.). The Examiner also found that Pasley describes the plug of
6 claims 5-10. (Id.)(citing Pasley 4:59).

7 The Appellants challenge the Examiner’s rejection of claim 1 by
8 asserting that the combined references do not teach or suggest all of the
9 features of the claim. (App. Br. 10). First, the Appellants assert that
10 “Stirling does not disclose a tapered hole extending from the first surface of
11 the lane panel to the second surface of the lane panel, wherein the area of the
12 tapered hole is larger at the first surface than at the second surface, as recited
13 in claim 1.” (Id.). According to the Appellants, Stirling instead describes a
14 hole that “has a taper which only extends partially through the middle
15 portion of the covering,” where the remaining portion of hole is not tapered.
16 (Id. 11).

17 We disagree with the Appellants’ claim interpretation. Claim 1
18 recites that the hole tapers such that “the area of the tapered hole is larger at
19 the first surface than at the second surface.” (See claim 1). Neither the
20 specification nor the claim further defines the disputed claim language.

21 The Appellants have not directed us to persuasive evidence that a
22 more narrow definition of the claim limitation applies, i.e., that “a tapered
23 hole extending from the first surface of the lane panel to the second surface
24 of the lane panel” requires the entire taper of the hole to extend from the first
25 to second surface of the lane panel. It is reasonable to construe this claim to

1 only require a taper at any part of the hole. It is the Applicants' burden to
2 precisely define the invention, not the PTO's. *In re Morris*, 127 F.3d 1048,
3 1056 (Fed. Cir. 1997).

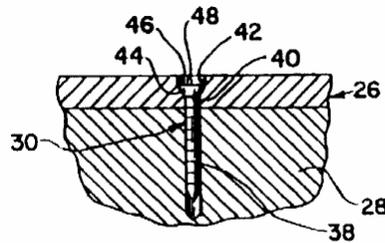
4 Stirling's lane panel comprising a hole that extends from the first
5 surface of the lane panel to the second surface of the lane panel, wherein the
6 hole has a tape that partially extends through the middle portion of the panel,
7 and the area of the tapered hole is larger at the first surface than at the
8 second surface, therefore falls within the scope of instant claim 1. The
9 Appellants have not established that the Examiner erred in so determining.

10 The Appellants further assert that "Pasley does not compensate for the
11 deficiencies of Stirling," regarding the tapered hole of claim 1. In support of
12 this assertion the Appellants recite various embodiments of Pasley. (*See*
13 *App. Br. 11-12*).

14 This assertion is also unpersuasive. As discussed, Stirling alone
15 describes this limitation of claim 1. Moreover, Pasley is evidence that even
16 a tapered hole in which the hole *and the taper* extend from the first surface
17 to the second surface of a structure was known in the art at the time of the
18 invention. (Ans. 4, 11). Consequently, we do not find error with the
19 Examiner's rejection.

20 Next, the Appellants assert that the Examiner erred in finding that the
21 combined references describe "a fastener having a head and a securing
22 portion, the head being disposed in the tapered hole and having a wall
23 having a taper at substantially the same angle as the tapered hole, the
24 securing portion extending from the head into the underlayment, as recited
25 in claim 1." (*App. Br. 14*). Specifically, the Appellants assert that the

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Fig. 2

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{Figure 2 shows a fragmented section of a mechanical fastening
mechanism}

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As the Examiner stated, Stirling describes “a fastener having a head
7 44 and a securing portion 38, the head being disposed in the tapered hole 42
8 and having a wall having a taper at substantially the same angle as the
9 tapered hole ... the securing portion 38 extending from the head into the
10 underlayment.” (Ans. 3).

11

Regarding Stirling, the Appellants repeat the assertion that “Stirling’s
12 hole ... would still not constitute a tapered hole extending from the first
13 surface of the covering to the second surface of the covering.” (App. Br.
14 14). We have discussed, supra, that Stirling describes a tapered hole, as
15 claimed. Consequently, we find that the Examiner did not error in rejecting
16 claim 1 over Stirling and the Appellants have not established otherwise.

17

Second, with respect to the Examiner’s reliance on Pasley, we remain
18 unpersuaded of error. Pasley expressly describes a fastener comprising a
19 tapered anchor 20 and a threaded stud 22 that is “secured to the backing 2.”

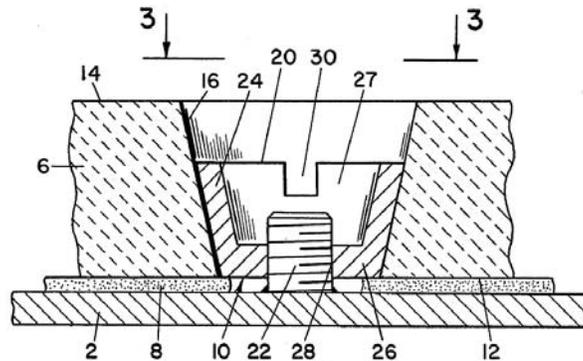
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(Pasley 2:68-3:4). Pasley Figure 2, reproduced below, illustrates the

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threaded stud 22, i.e., securing portion, extending from the anchor 20, i.e.,

1 head, into the backing 2, i.e., underlayment, as claimed.



2 FIG. 2

3 {Figure 2 depicts a cross section of a fastening device.}

4 The Appellants further assert that the “combination of Stirling and
5 Pasley is improper because ... there no reasonable expectation of success of
6 replacing the fastener of Stirling with that of Pasley, as suggested by the
7 Examiner.” (App. Br. 14).

8 Specifically, the Appellants assert that Stirling describes driving
9 screws through the covering and into the existing wood bowling lane,
10 whereas, Pasley describes welding a metal anchor to a metal backing. (Id.).
11 Therefore, the Appellants conclude that “[t]here is no reasonable expectation
12 of success of welding the metal anchor 42 to the existing wood bowling lane
13 of Stirling, because, generally speaking, metal cannot be successfully
14 welded to wood.” (Id.).

15 This argument is unpersuasive as the Appellants have failed to
16 properly consider the level of one of ordinary skill in the art. The law
17 presumes skill on the part of the artisan rather than the converse, *see In re*
18 *Sovish*, 769 F.2d 738, 743 (Fed. Cir. 1985), including the skill to

1 successfully select and fasten an anchor to wood instead of trying to weld
2 steel to wood. Therefore, we sustain the Examiner's rejection.

3 The Appellants further assert that the combination of Stirling and
4 Pasley is improper because Pasley is not analogous art as it is directed to
5 connecting ceramic tiles to a metal backing for a chute conduit," rather than
6 to a panel structure for a bowling lane. (App. Br. 15). The Appellants also
7 assert that Pasley is not reasonably pertinent to the problem addressed by the
8 applicants, namely, "attaching a bowling lane panel to an underlayment to
9 achieve a desired flatness and without fracturing the lane panel." (Id.).

10 First the Appellants characterize the relevant art too narrowly. Pasley
11 address the problem facing the inventor of the instant application, that is,
12 finding an improved method of fastening two panel-like parts together. (See
13 Ans. 19; see also Specification p. 3, ¶ 004, stating that "[t]he invention is
14 directed to a system for attaching the lane panel to the underlayment.").

15 Specifically, Pasley describes that the invention relates to "fastening devices,
16 and more particularly to fastening devices for attaching linear segments to a
17 backing." (Pasley 1:6-8).

18 Moreover, contrary to the Appellants' assertion, (App. Br. 15), Pasley
19 also provides motivation for employing its fastening device in the lane
20 panels of Stirling by teaching that the fastener secures the tile in place while
21 allowing the anchor to be easily removed, so that the tiles may be easily
22 replaced on an individual basis." (Id. 1:50-59). As Stirling describes, the
23 invention is directed to solving problems related to repairing the surface of
24 the wood lane that have become worn and irregular. (Stirling 1:23-29; 2:4-
25 14). Insofar as the motivation to combine references if for a purpose

1 different than that of the Appellants, the motivation is nevertheless valid.

2 *See In re Kemps*, 97 F.3d 1427, 1430 (Fed. Cir. 1996).

3 Therefore, we conclude that the Examiner did not err in determining
4 that it would have been obvious to one of ordinary skill in the art at the time
5 of the invention to combine the references to arrive at the claimed invention.
6 Nor was the Examiner's determination the result of inappropriate hindsight.
7 (See App. Br. 16). A reconstruction is not improper if it relies on ordinary
8 skill at the time of the invention and not on knowledge gained solely from
9 the applicant's disclosure. *See In re McLaughlin*, 443 F.2d 1392, 1395
10 (C.C.P.A. 1971).

11 *Claim 7*

12 Claim 5 recites, "The panel structure of claim 1, further comprising a
13 plug disposed within the tapered hole above the fastener." (App. Br.
14 Appendix 41).

15 Claim 7 recites, "The panel structure of claim 5, wherein the plug
16 includes a wall tapered at substantially the same angle as the tapered wall of
17 the tapered hole." (Id.).

18 The Appellants assert that the Examiner erred in rejecting claim 7
19 because "Pasley does not teach or suggest that the ceramic plug or filler
20 material has a tapered wall...[that is] tapered at substantially the same angle
21 as the tapered wall of the tapered hole." (App. Br. 16).

22 In particular, the Appellants assert that Pasley describes closing the
23 large ends of the tapered holes using a ceramic plug or filler material such as
24 epoxy, but "provides no description of the shape of such a plug or filler
25 material. (Id.). The Appellants also assert "that a plug having tapered walls

1 would not work effectively” in Stirling’s structure because Stirling describes
2 a disc-shaped plug that is inserted into a cylindrical recess. (App. Br. 16).

3 These arguments are not persuasive, and border on frivolous. In
4 essence, the Appellants are arguing that the Examiner erred because it would
5 not have been obvious to one of ordinary skill in the art to shape a plug like
6 the hole it is filling. We disagree. It would have been obvious to a skilled
7 artisan at the time of the invention would who reviewed Pasley’s that closing
8 tapered holes with a ceramic plug or a filler material such as epoxy would
9 require using plug or filler material that is also tapered. (Ans. 20; Pasley
10 2:58-60). Moreover, as discussed supra, Stirling describes a hole wherein
11 the large end of the hole is tapered. Therefore, the Examiner did not err in
12 combining Pasley’s plug, designed to close the large end of a tapered hole,
13 with Stirling’s hole that is tapered at the large end.

14 *Claims 8-10*

15 Claim 8 recites,

16 8. The panel structure of claim 5, wherein the head includes
17 a recess formed in a top surface, the plug including a projection
18 configured to project into the recess.

19

20 Claim 9 recites,

21 9. The panel structure of claim 5, wherein the plug
22 comprises a generally fluid material.

23

24 Claim 10 recites,

25 10. The panel structure of claim 9, wherein the plug is
26 formed of urethane.

27 (App. Br. Appendix 21).

1 The Appellants assert that the additional limitations of claims 8-10
2 render those claims patentable. (App. Br. 17-19).

3 This argument is unpersuasive as the Appellants have not established
4 that it would have been beyond the skill of an ordinarily skilled artisan at the
5 time of the invention to (1) understand that the shape of a plug made of
6 epoxy would conform to the shape of the anchor head, (2) that epoxy is “a
7 generally fluid material,” and (3) that epoxy urethane is old and well known
8 in the art and one would know how to use it (see Ans. 21, citing Tosh, US
9 Patent 4,705,841). As we have stated, an artisan must be presumed to know
10 something about the art apart from what the references disclose. *See In re*
11 *Jacoby*, 309 F.2d 513, 516 (CCPA 1962).

12 We note that the Appellants have put forth no persuasive evidence
13 that the further limitations of claims 8-10 would have been unobvious to the
14 skilled artisan. Accordingly, this argument does not persuade us of error.

15 *Claims 13-14*

16 Claim 13 recites,

17 13. The panel structure of claim 1, further comprising an
18 insert disposed in the underlayment, the insert being configured
19 to receive the securing portion of the fastener.

20

21 Claim 14 recites,

22 14. The panel structure of claim 13, wherein the insert is
23 threaded.

24

25 (App. Br. Appendix 21).

26 The Appellants assert that the additional limitations of claims 13 and
27 14 render the claims patentable. (App. Br. 19-21). Such an argument
28 essentially represents that the Appellants are unaware of any material art

1 contrary to this assertion (see 37 CFR §56(b)(2)(ii)), and asks this panel to
2 accept the position that a common wall anchor with a thread would not have
3 been obvious to use as an anchor in the claimed structure.

4 This argument is unpersuasive. The Appellants have provided no
5 persuasive evidence that it would have been beyond the skill of an ordinarily
6 skilled artisan at the time of the invention to dispose a threaded insert in the
7 underlayment and configure it so as to receive a securing portion of the
8 fastener, as claimed. As the Examiner stated, such a design step would have
9 been obvious and considered well within the grasp of a person of ordinary
10 skill in the art of fasteners at the time of the invention. (Ans. 22)(citing *KSR*
11 *Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727 (2007)).

12 Without persuasive evidence to the contrary, the Appellants'
13 argument fails.

14 *Claims 15 and 16*

15 Claim 15 recites,

16 15. The panel structure of claim 1, wherein the head and the
17 securing portion are integral.

18

19 Claim 16 recites,

20 16. The panel structure of claim 1, wherein the head is
21 configured to connect onto the securing portion.

22

23 (App. Br. Appendix 21).

24 The Appellants assert that that the combined references do not
25 describe a panel structure, as recited in claims 15 and 16. (App. Br. 21-22).
26 With respect to Stirling, the Appellants concede that “the head and the
27 securing portion of the screw are likely integral,” as recited in claim 15. (Id.

1 21). However, according to the Appellants, the Examiner’s suggested
2 modification of Stirling replaces the screw with the fastener of Pasley
3 causing the Stirling fastener to be “irrelevant.”

4 This argument is unpersuasive. As discussed, supra, Stirling by itself
5 recites the limitations of claim 1. Thus, Stirling’s teaching a panel structure
6 wherein the head and the securing portion are integral is relevant and renders
7 claims 15 obvious.

8 Next, the Appellants assert that Pasley does not describe the
9 limitations of claim 16 because Pasley does not teach that the securing
10 portion 28 extend into the underlayment, as required by claim 1, from which
11 claim 15 depends.” (Id. 21-22).

12 This argument remains unpersuasive for the same reasons as claim 1.

13 *Claim 17*

14 Claim 17 recites,

15 17. The panel structure of claim 1, wherein the securing
16 portion includes a first section and a second section, the first
17 section being configured to attach to the head and the second
18 section extending into the underlayment.

19
20 (App. Br. Appendix 21).

21 The Appellants assert that the Examiner erred in rejecting claim 17 for
22 the same reasons asserted for claim 13. Further, the Appellants assert that
23 the combined references do not describe that the securing portion recited in
24 claim 17.

25 This argument is not persuasive. As the Examiner stated, Pasley
26 teaches that the fastener may have a removable head portion while leaving
27 the securing portion secured to the underlayment. (Ans. 23). Consequently,

1 Pasley describes the limitations of claim 17 and the Examiner has not erred
2 in rejecting the claim.

3 *Claims 18-23 and 29, 24-27, 30-34, 40-42, 46 and 48*

4 The Appellants challenge the Examiner's rejection:

5 - of claims 18-23 and 29 by repeating the assertions raised regarding
6 the rejection of claim 1. (App. Br. 24-25).

7 - of claims 24-27 for the same reasons asserted for claims 7-10,
8 respectively. (App. Br. 26-29).

9 - of claims 30-34 for the same reasons asserted for claims 13-17,
10 respectively. (App. Br. 29-33).

11 - claims 40-42 for the same reasons asserted for claims 8-10,
12 respectively. (App. Br. 34-36).

13 - of claims 46 and 48 for the same reasons asserted for claims 13 and
14 16, respectively. (App. Br. 37-38).

15 These assertions are unpersuasive for the reasons discussed, supra.

16 *Claim 35-39, 43 and 47*

17 Representative Claim 35 recites,

18 35. A method for installing a bowling lane, comprising;
19 Forming a tapered hole in a lane panel, the lane panel
20 having a top and a bottom surface, the tapered hole extending
21 from the top surface of the lane panel to the bottom surface of
22 the lane panel, wherein the area of the tapered hole is larger at
23 the top surface than at the bottom surface;
24 placing the lane panel on an underlayment;
25 driving a securing portion of a fastener into the
26 underlayment; and
27 driving a head of the fastener into the tapered hole in the
28 lane panel, the head having a wall having a taper at
29 substantially the same angle as the tapered hole.

1
2 (App. Br. Appendix 24).

3 The Appellants assert that claim 35 is patentable because
4 Stirling does not describe a method. (App. Br. 34). The Appellants,
5 however, note that “[i]nasmuch a method may be implicit in the
6 description of Stirling’s structure....the Examiner has failed to identify
7 any such method steps on the record” (Id.). The Appellants further
8 assert the that the claim is not obvious for the same reasons raised
9 regarding claims 1 and 7.

10 This argument is not persuasive. Stirling’s structure implicitly
11 describes a method for installing the bowling lane (see, at a minimum,
12 the Abstract, where fasteners are positioned in recessed in the overlay
13 upper sheet and extend through the tapered hole in the sheet for
14 securement to the lane, followed by force fitting plugs). Thus, it
15 would have been obvious to a person of ordinary skill in the art at the
16 time of the invention to install a bowling lane according to the
17 teachings of Stirling. Consequently, the Appellants have not shown
18 error on the part of the Examiner.

19 *Claim 44*

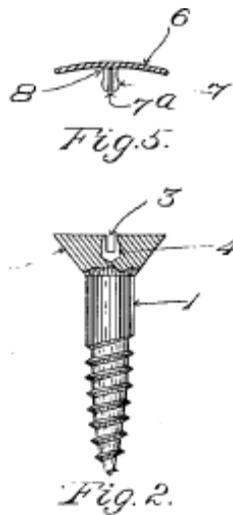
20 Claim 44 recites, “The method of claim 38, comprising snapping the
21 plug onto the head.” (App. Br. Appendix 24). Claim 38 recites, “The
22 method of claim 35, further comprising installing a plug into the tapered
23 hole above the head of the fastener.” (Id.).

24 The Appellants assert that the additional limitation of claim 44 renders
25 the claim patentable. While we agree that neither Stirling nor Pasley
26 describe a plug snapped onto the fastener, and reverse this rejection as it

1 applies to claim 44, we nonetheless exercise our discretion and enter a new
2 ground of rejection as follows.

3 Claim 44 is rejected under 35 U.S.C. § 103(a) over the combination of
4 Stirling, Pasley and Bowen.

5 Bowen describes an ornamental cap for screws and fasteners. Bowen
6 Figure 2 is reproduced below:



7
8 {Figure 2 is a cross sectional view of a fastener with a snap-on cap.}

9 Stirling and Pasley are as discussed in the Examiner's rejection. It
10 would have been obvious to one of ordinary skill in the art at the time the
11 invention was made to use a snap-on cap as described in Bowen as a plug in
12 the tapered hole above the head of the fastener as claimed in claim 44 to
13 obtain the decorative improvements in covering a marred surface, as
14 described in Bowen p. 1, l.80.

15 Accordingly, we affirm the Examiner's rejections, except as to claim
16 44, and enter a new ground of rejection as to claim 44 as discussed above.

1 II. The Rejection of Claims 11, 28 and 45 under 35 U.S.C. § 103(a)
2 over Stirling, Pasley and Bowen.

3 Claims 11, 28 and 45 stand rejected under 35 U.S.C. § 103(a) over the
4 combination of Stirling, Pasley and Bowen (US Patent 4,137,681). Claims
5 11, 28 and 45 and depend from claims 1, 18 and 35, respectively.

6 Representative Claim 11 recites,

7 11. The panel structure of claim 5, wherein the plug and the
8 head are attached by a ball joint.

9
10 Claim 5 recites,

11 5. The panel structure of claim 1, further comprising a plug
12 disposed within the tapered hole above the fastener.

13
14 Specifically, the Examiner found that Stirling and Pasley do not
15 describe a ball joint. (Non-Final Rejection, Jun. 6, 2006, p. 2, incorporated
16 by reference in Final Rejection, Nov. 14, 2006, p. 2). However, the
17 Examiner found that Bowen teaches that it would have been obvious to a
18 person of ordinary skill in the art at the time of the invention to “use a ball
19 and socket in a fastener like the one shown by Stirling in order to attach a
20 finishing cap or cover.” (Id.).

21 The Appellants assert that the Examiner erred in relying on Bowen as
22 teaching the additional limitations of claims 11, 28 and 45 because “Bowen
23 does not show a ball joint, nor is a ball joint discussed in the disclosure of
24 Bowen.” (App. Br. 38). According to the Appellants, Bowen’s figures only
25 describe that a “cap 6 has a concave upper surface with downward extending
26 slits 7a, 7a (fingers) which attach to the head of the fastener 4 (wood
27 screw).” (Id. 39).

Appeal 2008-4910
Application 10/898,254

1

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AFFIRMED

3 ack

4

5 cc:

6

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