

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* YOSHIHIKO SHIODA

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Appeal 2007-1694  
Application 10/124,103  
Technology Center 3700

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Decided: May 29, 2007

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Before DONALD E. ADAMS, ERIC GRIMES, and NANCY J. LINCK,  
*Administrative Patent Judges.*

ADAMS, *Administrative Patent Judge.*

DECISION ON APPEAL

This appeal under 35 U.S.C. § 134 involves pending claims 1-18. We have jurisdiction under 35 U.S.C. § 6(b).

## INTRODUCTION

Representative claims 1, 2, and 16 are reproduced below:

1. A golf practice and exercise device, comprising an object at least as large as a conventional softball for striking with a golf club, said object having a resilient outer wall defining a hollow interior, said outer wall having a vent opening therethrough to allow restricted air flow out of the hollow interior upon inward flexing of the resilient outer wall when the object is struck by a golf club and to allow air to re-enter the hollow interior when the resilient outer wall reflexes to its original shape following the striking by a golf club.

2. A golf practice and exercise device according to claim 1 wherein the vent is of a diameter between approximately 4 mm and approximately 10 mm.

16. A golf practice and exercise device according to claim 4 and characterized further by a target assembly against which the spherical object is propelled after being struck from a striking position a sufficient distance from the target assembly that when the spherical object is struck by a golf club swung by a golfer it travels in a direction imposed by the golfer's swing whereby the golfer can practice to control the travel of the practice ball and to develop golf swing strength.

The Examiner relies on the following prior art references to show unpatentability:

Spector	US 5,380,002	Jan. 10, 1995
Mason	US 6,012,997	Jan. 11, 2000
Conley	US 6,053,829	Apr. 25, 2000
Coughlan	US 6,319,145 B1	Nov. 20, 2001

The Examiner presents the following grounds of rejection:

1. Claims 1, 3, 4, 7, 8, 11, and 15 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Conley.
2. Claims 1, 4, 6-8, 10, 11, 13, and 15 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Spector.
3. Claims 2, 5, and 9 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Conley.
4. Claims 2, 5, 9, 12, and 14 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Spector.
5. Claims 16-18 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Spector and Coughlan.
6. Claims 16-18 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Mason and Coughlan.

We affirm.

## DISCUSSION

### CLAIM INTERPRETATION

Claim 1 is drawn to a device. Claims 2-18 depend, directly or indirectly, from claim 1. The device of claim 1 comprises an object that (1) is *at least as large* as a conventional softball and (2) has a resilient outer wall defining a hollow interior. The outer wall material “may be of leather, rubber, vinyl or other synthetic material” (Specification ¶ 35). Claim 1 requires the resilient outer wall to have a vent opening there through to allow restricted air flow out of the hollow interior upon inward flexing of the resilient outer wall and to allow air to re-enter the hollow interior when the resilient outer wall reflexes to its original shape.

The object of claim 1 is for striking with a golf club. Air will flow out of the hollow interior of the object when it is struck by a golf club and re-enter the hollow interior of the object after being struck by a golf club.

There is, however, no requirement in claim 1 to strike the object with a golf club. The intended use of the object “for striking with a golf club” (claim 1) and the resulting effect on air flow, out of or into the hollow interior of the object, do not limit the scope of the claimed device. *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997) (product claim’s intended use recitations not given patentable weight); *see also Boehringer Ingelheim Vetmedica v. Schering-Plough Corp.*, 320 F.3d 1339, 1345, 65 USPQ2d 1961, 1965 (Fed. Cir. 2003) (“An intended use or purpose usually will not limit the scope of the claim because such statements usually do no more than define a context in which the invention operates.”).

Claim 2 depends from claim 1 and requires that the diameter of the vent, on the resilient outer wall of the object, is between approximately 4 mm and approximately 10 mm.

Claim 16 ultimately depends from claim 1 and requires the device to comprise a spherical object and a target assembly against which the spherical object is propelled after being struck from a striking position a sufficient distance from the target assembly.

There is no requirement in claim 16 to actually strike the object with a golf club. Instead, claim 16 states that when the spherical object is struck by a golf club swung by a golfer it travels in a direction imposed by the golfer’s swing whereby the golfer can practice to control the travel of the practice ball and to develop golf swing strength. The claim does not exclude propelling the spherical object toward the target assembly by another means,

such as kicking the spherical object. Accordingly, we find that the intended use of the object does not limit the scope of the claimed device.

#### CONLEY

Conley teaches a ball having a diameter of one to approximately three feet (Conley, col. 3, ll. 35-38). Conley's ball "is preferably made from a smooth, waterproof and tear-resistant material such as vinyl coated nylon panels . . . stitched together to form a sphere" (Conley, col. 2, ll. 29-31). "Although vinyl coated nylon is the preferred material for the shell . . . any durable water resistant material would be appropriate" (Conley, col. 2, ll. 35-37). Conley's resilient outer wall defines a hollow interior that contains filler material (Conley, col. 2, ll. 13-14). Appellant's claim 1 does not exclude the addition of filler or other material to the hollow interior of the object. Conley's ball includes at least one air vent that works in conjunction with an aperture and allows air into and out of the ball (Conley, col. 3, ll. 8-13). Conley teaches that it is important to allow air to enter and exit the ball through the vent and aperture to prevent the ball from splitting when pressure is applied to the ball (Conley, col. 3, ll. 19-23).

In sum, Conley teaches a device that comprises an object that is at least as large as a conventional softball. Conley's device has a resilient outer wall defining a hollow interior. In addition, Conley's device has a vent to allow restricted air flow out of the hollow interior upon inward flexing of the resilient outer wall and to allow air to re-enter the hollow interior when the resilient outer wall reflexes to its original shape.

Claims 1, 3, 4, 7, 8, 11, and 15 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Conley. Claims 1, 3, 4, 7, 8, 11, and 15 are grouped together (Supplemental Br. 7).<sup>1</sup> Therefore, we limit our discussion to representative claim 1. Claims 3, 4, 7, 8, 11, and 15 will stand or fall together with claim 1. 37 C.F.R. § 41.37(c)(1)(vii).

The Examiner finds that Conley teaches a device that comprises an object with a vent as set forth in Appellant's claim 1 (Answer 3). We agree.

Appellant asserts that "the game ball of the Conley reference has no relation to and could not be used as a golf exercise and practice device and certainly would not be an object used for striking by a golf club" (Br. 6). As discussed above, we find that the intended use of the device is not a limitation on the claimed device. Accordingly, we are not persuaded by Appellant's argument.

We are also not persuaded by Appellant's intimation that the size of Conley's ball is outside the scope of the device set forth in claim 1 (*id.*). Claim 1 requires that the device comprise an object that is "*at least as large as a conventional softball*" (claim 1, emphasis added). Conley's ball is at least as large as a conventional softball.

For the foregoing reasons we find that the Examiner set forth a prima facie case that claim 1 is anticipated by Conley, which Appellant has not rebutted. Therefore, we affirm the rejection of claim 1 under 35 U.S.C.

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<sup>1</sup> The Examiner found Appellant's Brief defective with regard to the recitation of, *inter alia*, the grouping of claims (Notice of Non-Compliance with 37 CFR [§] 1.192(c)). Appellant's Supplemental Brief clearly sets forth Appellant's intended claim grouping (*see* Supplemental Br. 7). Accordingly, we have grouped the claims as set forth in Appellant's Supplemental Brief.

§ 102(b) as anticipated by Conley. Claims 3, 4, 7, 8, 11, and 15 fall together with claim 1.

Claims 2, 5, and 9 stand rejected under 35 U.S.C § 103(a) as unpatentable over Conley. Claims 2, 5, and 9 are grouped together (Supplemental Br. 7). Therefore, we limit our discussion to representative claim 2. Claims 5 and 9 will stand or fall together with claim 2.

37 C.F.R. § 41.37(c)(1)(vii).

Conley is relied upon as set forth above. The Examiner finds that Conley does not teach a vent size having a diameter of 4 – 10 mm as required by claim 2 (Answer 3). The Examiner finds, however, that “absent a showing of unexpected results the claimed 4mm to 10mm size would have been obvious to the ordinarily skilled artisan depending on the ease with which one wished to allow air to vent from the ball” (*id.*). We agree. Conley teaches that the vent “has sufficiently small openings to prevent the filler material . . . from passing through the vent . . . while permitting free flow of air within the shell . . .” (Conley, col. 3, ll. 13-16). A minor modification of the prior art, such as limiting the device to a particular size, does not distinguish the claimed product from the prior art. *See KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007) (It is proper to “take account of the inferences and creative steps that a person of ordinary skill in the art would employ.”). *See also id.* at 1742, 82 USPQ2d at 1397 (“A person of ordinary skill is also a person of ordinary creativity, not an automaton.”). As set forth in *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955), “it is not inventive to discover the optimum or workable ranges by routine experimentation.”

Appellant asserts that Conley does not teach an object that is “near the approximate size of a conventional soccer ball with a vent opening approximately 4 millimeters to 10 millimeters in diameter” (Br. 8). We are not persuaded by Appellant’s argument.

Claim 2 places no restriction on the size of the object. Therefore, the size of the object is defined by claim 1, from which claim 2 depends. Claim 1 requires an object that is “*at least as large as a conventional softball*” (claim 1, emphasis added). Conley’s ball is at least as large as a conventional softball.

As to the diameter of the vent, we find Appellant’s argument insufficient to rebut the Examiner’s finding that “absent a showing of unexpected results the claimed 4mm to 10mm size would have been obvious to the ordinarily skilled artisan depending on the ease with which one wished to allow air to vent from the ball” (Answer 3).

For the foregoing reasons, we find that the Examiner set forth a prima facie case that claim 2 is unpatentable over Conley, which Appellant has not rebutted. Therefore, we affirm the rejection of claim 2 under 35 U.S.C § 103(a) as being unpatentable over Conley. Claims 5 and 9 fall together with claim 2.

## SPECTOR

Spector teaches a spherical ball “having a diameter corresponding to that of a regulation basketball, a soccerball or a baseball” (Spector, col. 4, ll. 34-36). Spector’s ball “is constituted by an outer casing . . . having a spherical shape within which is confined a compressible internal body . . .

whose shape conforms to that of a casing so that no space exists therebetween” (Spector, col. 4, ll. 38-41). Spector teaches that when the ball

is vigorously kicked or bounced, the shock is absorbed by the compressible internal body of the ball, but the shape of the ball is maintained by the elastomeric casing which permits indentation of the ball in the region at which the force is applied, but does not permit the ball to assume any shape than its predetermined spherical configuration.

(Spector, col. 5, ll. 40-46.) Spector also teaches that the outer casing of the ball includes a small closable port (e.g., vent) whereby water can be introduced into or extruded from the internal body of the ball (Spector, col. 3, ll. 35-44). Spector teaches that “[o]ne adds as much water as is necessary to bring up the weight of the ball to the desired level, at which point the port is closed to retain the water within the ball” (Spector, col. 5, ll. 31-34).

In sum, Spector teaches a device that comprises an object that is at least as large as a conventional softball. Spector’s device has a resilient outer wall defining a hollow interior. In addition, Spector’s device has a vent that would be expected to allow restricted air flow out of the hollow interior upon inward flexing of the resilient outer wall and to allow air to re-enter the hollow interior when the resilient outer wall reflexes to its original shape.

Claims 1, 4, 6-8, 10, 11, 13, and 15 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Spector. Claims 1, 4, 6-8, 10, 11, 13, and 15 are grouped together (Supplemental Br. 7). Therefore, we limit our discussion to representative claim 1. Claims 4, 6-8, 10, 11, 13, and 15 will stand or fall together with claim 1. 37 C.F.R. § 41.37(c)(1)(vii).

The Examiner finds that “[w]hen Spector’s plug . . . is removed Spector discloses the claimed device. . .” (Answer 3). We agree.

Appellant asserts that “there is no disclosure of a ball the size of a softball being hit by a golf club” (Br. 7). We are not persuaded by this argument. Claim 1 requires an object that is “*at least as large as a conventional softball*” (claim 1, emphasis added). Spector’s ball is at least as large as a conventional softball. In addition, for the reasons discussed above, claim 1 does not require that the object be hit with a golf club.

For the foregoing reasons we find that the Examiner set forth a prima facie case that claim 1 is anticipated by Spector, which Appellant has not rebutted. Therefore, we affirm the rejection of claim 1 under 35 U.S.C. § 102(b) as anticipated by Spector. Claims 4, 6-8, 10, 11, 13, and 15 fall together with claim 1.

Claims 2, 5, 9, 12, and 14 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Spector. Claims 2, 5, 9, 12, and 14 are grouped together (Supplemental Br. 7). Therefore, we limit our discussion to representative claim 2. Claims 5, 9, 12, and 14 will stand or fall together with claim 2. 37 C.F.R. § 41.37(c)(1)(vii).

Spector is relied upon as set forth above. The Examiner finds that Conley does not teach a vent size having a diameter of 4 – 10 mm as required by claim 2 (Answer 3-4). The Examiner finds, however, that “absent a showing of unexpected results the claimed 4mm to 10mm size would have been obvious to the ordinarily skilled artisan depending on the ease with which one wished to allow air to fill the ball” (Answer 4). We agree. “[I]t is not inventive to discover the optimum or workable ranges by routine experimentation.” *Aller*, 220 F.2d at 456, 105 USPQ at 235.

Appellant asserts that “there is nothing in Spector to suggest a dimension of 4 to 10 millimeters for a vent. . .” (Br. 9). We find Appellant’s argument insufficient to rebut the Examiner’s finding that “absent a showing of unexpected results the claimed 4mm to 10mm size would have been obvious to the ordinarily skilled artisan depending on the ease with which one wished to allow air to fill the ball” (Answer 4).

For the foregoing reasons we find that the Examiner set forth a prima facie case that claim 2 is unpatentable over Spector, which Appellant has not rebutted. Therefore, we affirm the rejection of claim 2 under 35 U.S.C. § 103(a) as being unpatentable over Spector. Claims 5, 9, 12, and 14 fall together with claim 2.

#### SPECTOR AND COUGHLAN

Claims 16-18 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Spector and Coughlan. Claims 16-18 are grouped together (Supplemental Br. 7). Therefore, we limit our discussion to representative claim 16. Claims 17 and 18 will stand or fall together with claim 16. 37 C.F.R. § 41.37(c)(1)(vii).

Spector is relied upon as set forth above. The Examiner finds that Spector “discloses the claimed device with the exception of the target assembly” (Answer 4). The Examiner relies on Coughlan to make up for this deficiency. The Examiner finds that Coughlan teaches that it was known in the art to use target assemblies with projectiles such as those taught by Spector (*id.*). Based on this evidence, the Examiner finds “[i]t would have been obvious to one of ordinary skill in the art to have used . . .

[Coughlan's target assembly] with Spector's ball . . ." (*id.*). We find no error in the Examiner's prima facie case of obviousness.

Appellant asserts that "[c]laims 16-18 depend from [c]laim 4, which stands rejected only as being anticipated by the Conley reference. Therefore, as the Conley reference does not anticipate [c]laim 4, as explained above, dependent [c]laims 16-18 are allowable" (Br. 9). Appellant's assertion is incorrect. Claim 4 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Spector or Conley (Answer 3; Final Rejection 2).

Appellant fails to identify any deficiency in the combination of Spector and Coughlan. Therefore, we summarily affirm the rejection of claim 16 under 35 U.S.C. § 103(a) as unpatentable over the combination of Spector and Coughlan. Claims 17 and 18 fall together with claim 16.

#### MASON AND COUGHLAN

Claims 16-18 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Mason and Coughlan. Claims 16-18 are grouped together (Supplemental Br. 7). Therefore, we limit our discussion to representative claim 16. Claims 17 and 18 will stand or fall together with claim 16. 37 C.F.R. § 41.37(c)(1)(vii).

The Examiner finds that "Mason discloses the claimed device with the exception of the target assembly" (Answer 4). The Examiner relies on Coughlan to make up for this deficiency. The Examiner finds that Coughlan teaches that it was known in the art to use target assemblies with projectiles such as those taught by Mason (*id.*). Based on this evidence, the Examiner finds "[i]t would have been obvious to one of ordinary skill in the art to have

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used . . . [Coughlan's target assembly] with Mason's ball . . ." (*id.*). We find no error in the Examiner's prima facie case of obviousness.

Appellant asserts that "[c]laims 16-18 depend from [c]laim 4, which stands rejected only as being anticipated by the Conley reference. Therefore, as the Conley reference does not anticipate [c]laim 4, as explained above, dependent [c]laims 16-18 are allowable" (Br. 9). Appellant's assertion is incorrect, and in any event does not identify any deficiency in the combination of Mason and Coughlan. Therefore, we summarily affirm the rejection of claim 16 under 35 U.S.C. § 103(a) as unpatentable over the combination of Mason and Coughlan. Claims 17 and 18 fall together with claim 16.

#### CONCLUSION

In summary, we affirm all rejections of record.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

dm

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