Trial decision

Invalidation No. 2008-880022

Tokyo, Japan Demandant	CALLAWAY GOLF CO. LTD.
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Aichi, Japan Patent Attorney	OKAMOTO, Yuji

The case of trial regarding the invalidation of design registration for Design Registration No. 1300582, entitled “Golf Ball,” between the parties above has resulted in the following trial decision.

Conclusion

Design Registration No. 1300582 is invalidated

The costs in connection with the trial shall be borne by the demandee.

Reason

No. 1 The Demander's object of the demand and the grounds therefor

The demandant demanded a trial decision whose content is the same as the conclusion, summarized grounds for the demand as follows, and submitted Evidences A No. 1 to A No. 4 (including their branch numbers) as means of evidence.

The design with Registration No. 1300582 (hereinafter referred to as the "Registered Design") is similar to the design for a golf ball described in the specification of U.S. Patent No. 4,991,852 (published on February 12, 1991) which is a publication that had been distributed before the Registered Design's application was filed. Accordingly, the Registered Design falls under the category of Article 3(1)(iii) of the Design Act, and thus its registration should not be invalidated under Article 48(1)(i) of the Design Act.

Namely, the Registered Design adopts the basic structure that hexagon dimples are densely arrayed on the entire surface of a golf ball such that the adjacent dimples share sides shown by thin lines, and specifically, the surface of the golf ball is divided into 20 spherical triangles and five hexagon dimples are disposed on a side of each triangle excluding apexes, and 10 hexagon dimples are disposed inside each triangle excluding sides, and a pentagonal dimple is disposed on each apex of the triangle, and 350 hexagon dimples and 12 pentagonal dimples are disposed on the entire surface of the ball.

On the other hand, the specification of the U.S. Patent No. 4,991,852 (Evidence A No. 1) has a title of invention "MULTI-PURPOSE GOLF BALL", and Fig. 1 shows the golf ball surface on which multiple hexagon dimples are densely arrayed, Fig. 2 shows part of a golf ball cover on which 384 hexagon dimples are formed, and Fig. 6 and Fig. 7 show that the spherical surface is sectioned in 20 spherical equilateral-triangles and hexagon dimples are arrayed on the sides and the inside of each triangle. Accordingly, the Registered Design and the design for the golf ball

shown in Fig. 2 of this specification coincide on the basic constitution that hexagon dimples are densely arrayed on the entire surface of the golf ball such that the adjacent dimples share sides shown by thin lines. Although there are differences: (1) whether 12 pentagonal dimples are present among hexagonal dimples or not; (2) the total number of dimples is 362 (the Registered Design) or 384 (Evidence A No. 1), the common basic structure strongly represents characteristics of the form, forms the basis of the entire form, and eventually forms the prominent feature which affects the similarity of the design because a circular dimple had been very general at the time of application for the Registered Design. In contrast, it is difficult to even recognize the difference, namely whether the pentagonal dimples are present or not, and the difference in the number of the dimples is slight, and therefore any of the differences does not express remarkable characteristics that distinguish the atmosphere of the entire form. Accordingly, both designs are similar and the Registered Design falls under Article 3(1)(iii) of the Design Act and the registration should be invalidated under the provision of Article 48(1)(i) of the Design Act.

No. 2 Demandee's reply and reasons

The demandee, in the written reply, requested the trial decision that "the demand for trial of the case was groundless. The costs in connection with the trial shall be borne by the demandant," summarized allegation as follows, and submitted Evidences B No. 1 to B No. 16.

The design recognized through Fig. 2 taking the explanation in the specification in Evidence A No. 1 into consideration is "a normal golf ball as the prior art that 384 circular dimples are disposed on the spherical surface in the unknown pattern that is presumed not to be an icosahedral pattern" but not "a golf ball having 384 hexagon dimples" as stated by the demandant. Accordingly, as the first primary claim, the cited design has obscure parts and is not illustrated so as to be compared and lacks the eligibility for citation. As the second preliminaryclaim, even if the cited design recognized through Fig. 2 in Evidence A No. 1 is compared, intentionally assuming that it is "a golf ball having 384 hexagon dimples" the portions, number and degree etc. of irregularity of 353 dimples not shown in Fig. 2 are unknown, and the dimple array pattern etc. are also unknown, and therefore the cited design are not clearly illustrated so as to enable the determination of similarity. Accordingly, at any rate, the Registered Design is not similar to the cited design and the reasons for invalidation alleged by the demandant is groundless.

No. 3 Judgment on the body

1. The Registered Design

A patent application (Japanese Patent Application No. 6-106107) dated April 20, 1994 was divided and the divided new patent application (Japanese Patent Application No. 2002-105535) was converted to an application for design registration on November 22, 2006 and the establishment of design right for the Registered Design was registered on April 6, 2007, and the article to the design is "a golf ball", and the shape is as described in the application and drawings attached to the application (please refer to Appendix 1).

Namely, the shape is that mainly pentagonal and slightly concaved dimples are densely arrayed on the entire surface of a golf ball such that the adjacent dimples share sides shown by thin lines, and specifically, the surface of the golf ball is divided into 20 spherical equilateral-triangles, 5 hexagon dimples are disposed on a side of each triangle excluding apexes, 10 hexagon dimples are disposed inside each triangle excluding sides, a pentagonal dimple is disposed on each apex of triangles namely each of 12 portions to which apexes of spherical equilateral-triangles are concentrated, 350 hexagon dimples and 12 pentagonal dimples are disposed on the entire surface of the ball, and the width of the land part left between the dimples is 0.5 mm.

2. Cited Design

The demandant submitted Evidence A No. 1-1, alleging that the Registered Design falls under the category of Article 3(1)(iii) of the Design Act.

Evidence A No. 1-1 is the specification (a copy) of U.S. Patent No. 4,991,852 issued by the USPTO (United States Patent and Trademark Office) on February 12, 1991.

This specification has a title of invention "MULTI-PURPOSE GOLF BALL" and illustrates the golf ball in Figs. 1 to 7 (refer to Appendix 2). Fig. 2 shows the form in a rectangle, that the hexagonal sections are densely arrayed such that the adjacent sections share sides that appear as thin lines. As it is described in " BRIEF DESCRIPTION OF THE DRAWINGS" in column 3, lines 12 to 32 of the specification that Fig. 2 is "an illustration of a portion of the cover of a conventional golf ball of the prior art projected in a flat plane" (Evidence A No. 1-2), so this figure is found as showing a portion of the golf ball surface as a two-dimensional flat plane. It is further described in column 3, lines 58 to 59 in the specification that the golf ball in Fig. 2 has 384 dimples. As seen from Fig. 2 in the specification and description related thereto, it can be found that the specification describes the design for a golf ball in which 384 hexagon dimples are densely arrayed on the entire surface of the golf ball such that the adjacent dimples share the sides that appear thin lines.

In this case, the demandee alleges that Fig. 2 is described as showing "a conventional golf ball of the prior art" in description of drawings described in column 3, line 17 of the specification, and that the dimples of the golf ball shown in Fig. 2 should be interpreted as circular. Namely, when this specification was filed, it had been extremely general and conventional that dimples of a golf ball are circular; and listing the fact that a golf ball having hexagon dimples can never be referred to as "a conventional golf ball", the fact that "an Acushnet Pinnacle having 384 dimples" used as "a conventional golf ball" in the comparative test in the specification has also circular dimples (column 5, lines 35 to 41 of the specification), and the fact that the specification describes the present golf ball having 812 dimples "having 812 concave hexagonal surface depressions" but does not refer to "a conventional golf ball" having hexagonal dimples (column 2, lines 31 to 38 of the specification), and therefore the demandee alleges that "a conventional golf ball" is obviously recognized to have circular dimples in the specification, and accordingly "a conventional golf ball" as shown in Fig. 2 should be naturally interpreted to have circular dimples.

However in this specification, Fig. 3 as well as Fig. 2 shows that in the same rectangle, hexagon sections having diameters half as large as diameters in Fi. 2 are densely arrayed such that the adjacent sections share the sides appearing as thin lines,

while according to "BRIEF DESCRIPTION OF THE DRAWINGS" in column 3, lines 12 to 32 of the specification, Fig. 3 is "an illustration of a portion of the cover of the present multi-purpose golf ball projected in a flat plane" (Evidence A No. 1-2), and according to the specification, column 2, lines 31 to 38, "the present invention" is characterized by "... having 812 concave hexagonal surface depressions arranged in a regular geodesic nine-frequency icosahedral pattern over the surface of the ball...". The hexagon sections in Fig. 3 obviously show the hexagon dimples on the ball surface without modification, and there is no reason for interpreting that Fig. 2 which is expressed in a style matching that of Fig. 3, and in which the same numeral "11" denotes the dimple in the corresponding hexagon section (Fig. 4 in the specification) shows the hexagon section having different structure from that in Fig. 3, or is interpreted in a different way from Fig. 3, and Fig. 2 as well as Fig.3 shows a part of the golf surface without modification, and it is naturally interpreted that the hexagon sections illustrate the dimples arranged on the ball surface without modification. The demandee's allegation that the hexagon dimples in Fig. 2 are interpreted to show circular dimples cannot be adopted.

The demandee further alleges that a golf ball having 384 dimples having hexagon dimples had not been present, and Fig. 2 shows the dimples having the same shape as the shape of the hexagon dimple in Fig. 3 only for convenience of stressing the difference in size of the surface diameter.

However, even if the golf ball in Fig. 2 is not present as the actual product, and Fig. 2 is merely illustrated for convenience of stressing other drawing, Fig. 2 is shown as part of the golf ball surface in the specification itself which is a publication, and a person who views this specification at least may sufficiently recognize the constitution in Fig. 2 as the constitution of the ball surface, and naturally understands as such. Additionally this specification presents Fig. 6 and Fig. 7 showing the specific dimple array of the present golf ball in Fig. 3, and a person who views this specification naturally recognizes that Fig. 2 shows only a golf ball having a small number of dimples in contrast with the golf ball illustrated in Fig. 3, Fig. 6 and Fig. 7, and the demandee's allegation that Fig. 2 is a drawing only for convenience sake and the shape therein should not be interpreted as the shape of the golf ball cannot be adopted.

As described above, the demandee's allegation that the shape of the dimples of the cited design should be interpreted as circular cannot be adopted, and as described above, it can be found that the specification illustrates the design for the golf ball

having 384 hexagon dimples that are densely arrayed on the surface such that the adjacent dimples share the sides appear as the thin lines, and the golf ball shown in Fig. 2 in this specification and shown by description related thereto will be compared as the cited design with the Registered Design below and its influence in the determination of the similarity will be studied.

3. Comparison, study and determination of similarity of the Registered Design and the cited design

Now, the Registered Design will be compared with the cited design.

The Registered Design and the cited design are common in the basic form of the golf ball shape that the mainly hexagonal and slightly concaved dimples are densely arrayed on the entire surface of a golf ball such that the adjacent dimples share sides appearing as the thin lines. Additionally, as for sizes of the dimples, the number of the dimples of the Registered Design is 362, while the number of the dimples of the cited design is 384, which are approximate values, and the ratio of the dimple to the size of the ball is almost the same.

And these common features extremely significantly affect the determination of the similarity of both designs.

Namely, at the time of application for the Registered Design, it had been very general that a dimple of a golf ball is circular, and the fact that a dimple is polygon, per se, extremely strongly represents characteristics of form. And the Registered Design and the cited design have strong commonality in the mainly hexagonal dimples being densely arrayed so as to share the sides appearing as the thin lines, which strongly expresses the characteristics of the form in both designs, and forms the constitute on which an observer focuses the most attention.

And visually, both designs are formed such that the mainly hexagonal dimples sandwich thin line having the same length as the land part to fill out the entire surface of the golf ball as if to remind the honeycomb structure in a homogeneous tone. This is integrated with the commonality of the ratio of the dimple size, and determines the common basis of the form as the golf balls of both designs and overwhelmingly captures the eye of observers.

Accordingly, the common features of both designs extremely significantly influences the determination of the similarity so that only the influence may determine the similarity of both designs.

On the other hand, the following main differences are identified: (1) as the dimple array, the Registered Design is formed such that the surface of the golf ball is divided into 20 spherical equilateral-triangles and 5 dimples are disposed on a side of each divided triangle excluding apexes, and 10 dimples are disposed therein, and a dimple at the position corresponding to an apex of the triangle is pentagonal which is different from other dimples, while the cited design is formed such that on any of extracted part of the ball surface, the dimples are arrayed as shown in Fig. 2, and it is not identified that the ball surface is at least divided into 20 spherical equilateral-triangles like the Registered Design and the dimples are arrayed based thereupon, and that pentagonal dimples are mixed. Additionally, Fig. 2 of the cited design is an illustration of the ball surface shown in a two-dimensional flat plane, while if this is illustrated as a spherical three-dimensional ball surface, any modification is added to each hexagon section and an array of hexagons will be somewhat corrected, but the specific mode of the modification and correction is not specified; and (2) the land width of the Registered Design is 0.5 mm while the actual numerical value of the cited design is not specified.

Accordingly, influences of the aforementioned differences and unclear points on the determination of the similarity will be studied.

Firstly as for (1), the Registered Design is formed such that the ball surface is divided into 20 spherical equilateral-triangles and 5 dimples are disposed on a side of each divided triangle excluding apexes, and 10 dimples are disposed therein, while employing a golf ball in so-called "an icosahedron pattern", namely dividing a golf ball surface into 20 spherical equilateral-triangles and arraying dimples thereon had been very general constitution since before an application for the Registered Design as found in, for example, Japanese Unexamined Patent Application Publication No. 48-19325 (Evidence A No. 2) or Japanese Unexamined Patent Application Publication No. 49-52029, and additionally employing "an icosahedron pattern" and then arraying 5 dimples on a side of each triangle excluding apexes, and arraying 10 dimples therein had been the extremely general constitution as found in, for example, Fig. 2 of Japanese Unexamined Patent Application Publication No. 61-56668, Figs. 7 to 9 of Japanese Unexamined Patent Application Publication No. 62-47379, Fig. 9(II) of Japanese Unexamined Patent Application Publication No. 1-221182 and Fig. 5 of Japanese Unexamined Patent Application Publication No. 3-140168, and the dimple array of the Registered Design merely followed the array pattern that had been

generally employed since before application therefor.

Additionally, Fig. 3 of "the present invention" for the cited design also employs an icosahedron pattern similarly to the Registered Design as the dimple array as shown in Figs. 6 and 7, and employing an icosahedron pattern as the hexagon dimple array is not characteristics unique to the Registered Design.

Further, the Registered Design is formed such that a dimple at the position corresponding to an apex of a triangle is pentagonal, but if hexagons are densely arrayed in an icosahedron pattern, the fact that a dimple at the position corresponding to an apex of a triangle is pentagonal is a natural constitution as shown in the central sections in Fig. 2 of Japanese Unexamined Patent Application Publication No. 57-107170 (in Fig. 2, centers of the dimples are connected and pentagons and hexagons shown by solid lines do not directly show the dimples) so as to be inevitable, and the fact that the dimple at the position corresponding to an apex of a triangle is pentagonal cannot be emphasized as original characteristics of the Registered Design.

And even if observing the entire form of the constitution (1), the fact that the dimple array of the Registered Design is based on an icosahedron array cannot be recognized until this is shown by virtual lines in figures etc. and cannot be apparently perceived immediately, and mixture of the pentagonal dimples cannot be perceived until pentagonal portions are emphatically shown in drawings, and the pentagonal dimples are dispersed and arrayed on the ball surface and embedded in an overwhelmingly large number of pentagon dimples and their presence is almost inconspicuous.

Also as for the cited design, Fig. 2 is certainly an illustration of dimples shown in a flat plane, the specific constitution of a hexagon generated by showing Fig. 2 on the ball surface spherically and modification of the arrangement cannot be specified. It is, however, shown that the cited design has almost the dimple shape and the dimple array as shown in Fig. 2 even if any part of the ball surface is extracted, and as far as the specification and the description of the drawings are referred to, it cannot be found that any modification and/or unique correction of the hexagon which especially draws an observer's attention appears in the cited design, and even if any modification and/or correction is made, there is no other choice but to interpret that this is the minimum modification and/or correction for filling the hexagon dimples uniformly on the ball surface nearly in the form shown in Fig. 2, which does not at least change the common features of both designs, namely the form in which the mainly pentagonal dimples are densely arrayed such that the adjacent dimples share the sides shown by thin lines.

Accordingly, even if considering that some details of the cited design cannot be specified in connection with the point (1), there is no other choice but to conclude that the differences between both designs are enough for being absorbed in the entire basis of the form common to both designs and are not enough for overwhelming the strong characteristics of form as a golf ball that the mainly hexagon dimples are densely arrayed so as to share the sides appearing as thin lines and creating a different sensation of both designs.

In connection with the point (1), the demandee alleges that the pentagonal dimples put accents on the Registered Design to create an aesthetic impression with narrowing and rhythmic senses as if some portions of front and back faces of a cushion are sewed together in the point-like form, and presents Evidence B No. 3 to Evidence B No. 11 as prior designs, and alleges that they are independently registered as having the respective unique accents and rhythmic senses and creating different aesthetic impressions and that the Registered Design is also found to create a new aesthetic impression.

However, as there is no large difference in areas of the pentagonal dimple and the hexagon dimple of the Registered Design, the pentagonal dimple is not so conscious as to play a role as an accent, and five sides of the pentagonal dimple are shared by sides of surrounding hexagon dimples, which gives an extremely strong impression that the pentagonal dimple is homogenized with the surrounding hexagons and it is not found that the pentagon especially brings the narrowing sense to the part or brings the rhythmic sense as a whole with the surrounding hexagons.

Not only a golf ball but also various types of balls having the combination of pentagonal and hexagon sections on the ball surface are very general as found in, for example, Japanese Unexamined Utility Model Application Publication No. 47-36582, Japanese Unexamined Patent Application Publication No. 55-91368, Japanese Unexamined Patent Application Publication No. 56-151068. Also from this standpoint, it is not considered that observers particularly focus the attention on the pentagonal dimples of the Registered Design.

And as prior designs for golf balls, golf balls having circular dimples had been certainly created from various standpoints such as division of spherical surfaces for the dimple array, array of dimples on the divided surfaces, sizes, concentration and dispersion of dimple diameters etc., which appear as approximate shapes in appearance due to the nature of objects, and persons involved in golf balls are presumed to generally have high performance to distinguish the dimple array or

dimple structure. If so, however, the Registered Design having polygon dimples per se represents extremely strong characteristics, which cannot be discussed equally with circular dimples, and further the circular dimples have various forms of land parts and integrated with the dimple structure to play a role of enhancing distinctiveness as a ball, while the land parts of these both designs are expressed as having the same size and equal width in the homogeneous tone and rather produces the effect of enhancing the consciousness of commonality. And even if considering the prior designs presented by the demandee sufficiently it is not still found that the constitution of the Registered Design in connection with the difference 1) overcomes the basis of the entire form common to both designs, and particularly characterizes the Registered Design and brings different aesthetic impressions to both designs.

As the difference (2), the width of the land part of the Registered Design is 0.5 mm, while that of the cited design is not explicitly specified. Considering that both designs have narrow land parts enough to be perceived as thin lines, even if both designs have concrete difference in width, this does not affect the determination of the similarity of both designs as a whole.

Additionally, in the column of "Description of Article to the Design" of the application of the Registered Design, it is described that a dimple is a shallow hexagonal pyramid-like concaveness and the deepest part is spherical, and accompanying drawings include [Perspective View of Referential Part] showing six lines extending from the center of a dimple in the radial direction and a circular line at the center.

However, if synthesizing this [Perspective View of Referential Part] in comparison with other six views etc., it is not found that these lines form valley-like lines having deep angles or lines catching eyes clearly to appear on the ball surface of the Registered Design, and these lines cannot be emphasized as characterizing the shape of the Registered Design when determining the similarity.

And even if synthesizing the aforementioned common features and differences to study both designs as a whole, the common features of both designs namely the basic constitution are defined by the shape that the mainly hexagonal and slightly concaved dimples are densely arrayed such that the adjacent dimples share the sides appearing as thin lines; and the ratio of sizes of the dimples is almost the same, which integrally determines basis of the form of the whole designs and simultaneously forms

characteristics of both designs, while the differences do not characterize both designs and are slight enough for being absorbed in the basis of the form of the entire designs that are formed by the common features visually because both designs are within the range of following the prior constitutions even if considering that some details of the cited design cannot be specified at the same level as that of the Registered Design, and even if the differences are synthesized, they are not found to overcome the basis of the form of the entire designs common to both designs and influences of the common features of both designs on the determination of the similarity overwhelms that of the differences and both designs are similar as a whole.

4. Conclusion

As described above, the Registered Design is similar to the cited design, and the cited design had been described in a publication distributed before the Registered Design's application was filed, and the Registered Design was registered although it falls under the category of Article 3(1)(iii) of the Design Act, and, therefore, should be invalidated.

Therefore, the trial decision shall be made as described in the conclusion.

June 29, 2009

Chief administrative judge: URIMOTO, Tadao
Administrative judge: ICHIMURA, Setsuko
Administrative judge: SUGIYAMA, Taichi

#1

C・P

別紙第１　　本件登録意匠

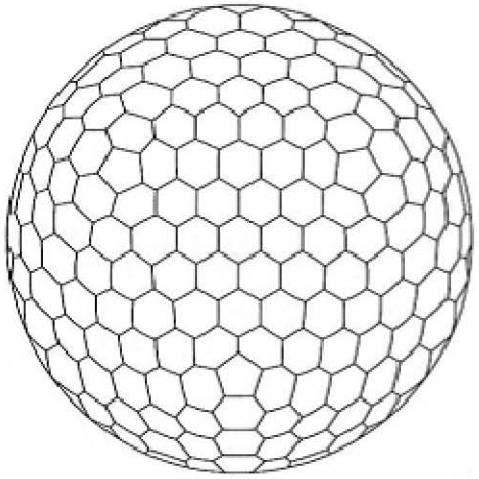
意匠に係る物品　　ゴルフボール

意匠に係る物品の説明　　この意匠に係るゴルフボールは、参考正面図、参考背面図、参考平面図、参考右側面図及び参考説明図に示すように、正二十面体の各辺を球表面に投影した仮想区画線２（これらの参考図においては２点鎖線で示した）の交点Ｐに五角形ディンプル７（これらの参考図においてはハッチングで示した）を配設し、一つの交点Ｐから延びる五本の仮想区画線２上に多数の六角形ディンプル４をランド６をおいて配設し、球面正三角形エリア３内には多数の六角形ディンプル５をランド６をおいて配設したものである。ランドとは球表面にディンプルを設けたときにディンプル間に残る陸部分をいい、ランド６の幅は０．５ｍｍである。参考部分斜視図に示すように、六角形ディンプル４，５の底部形状は浅い六角錐状の凹部であるが、最深部は球面状になっている。

意匠の説明　　底面図は平面図と同一にあらわれるため省略する。左側面図は右側面図と対称にあらわれるため省略する。

#2

正面図



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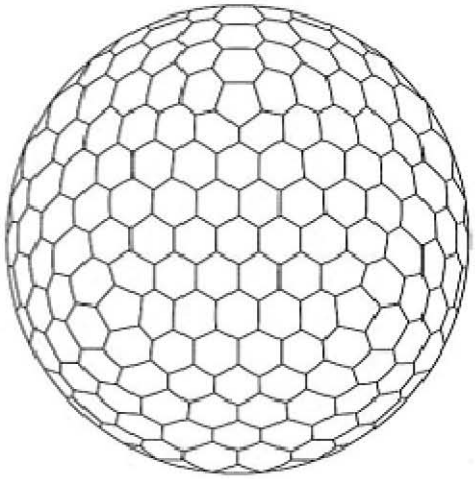

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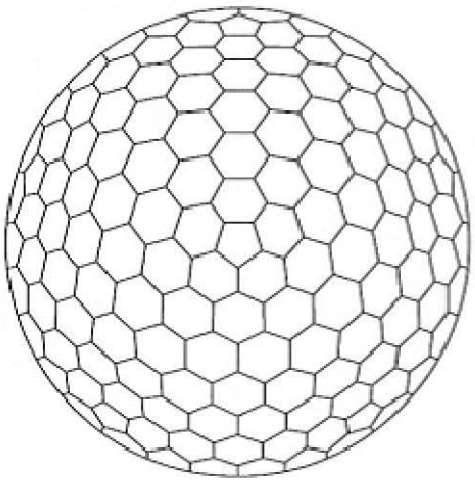

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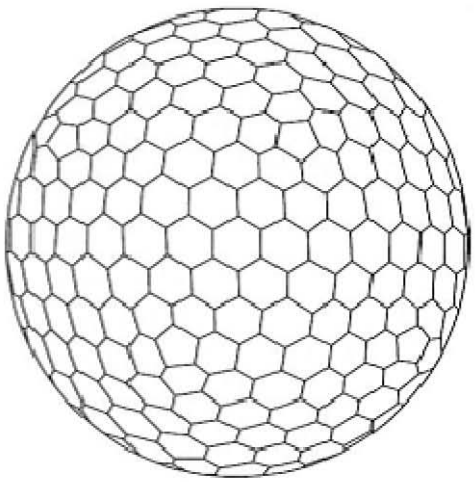
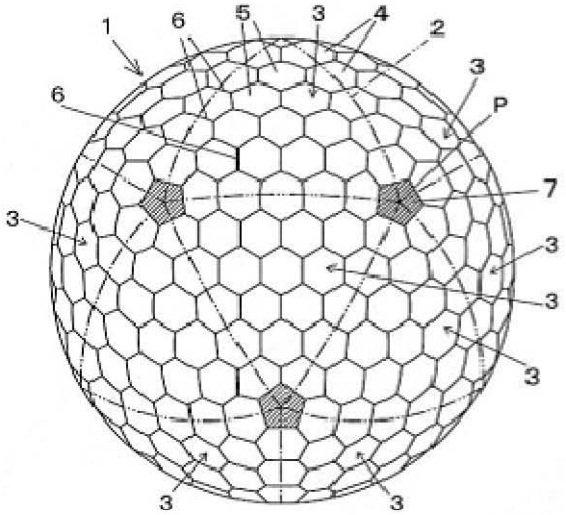


#6

参考正面図



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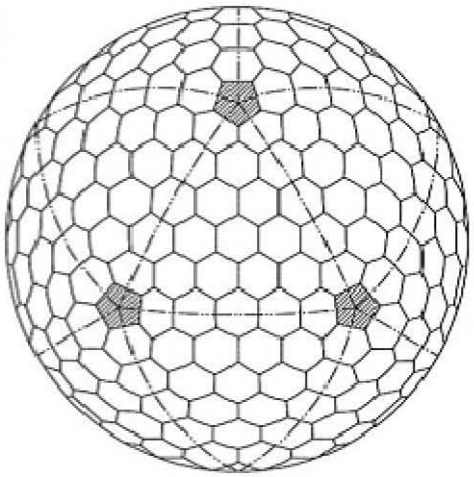

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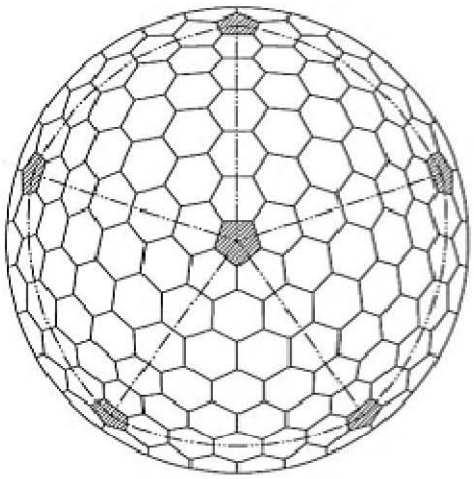

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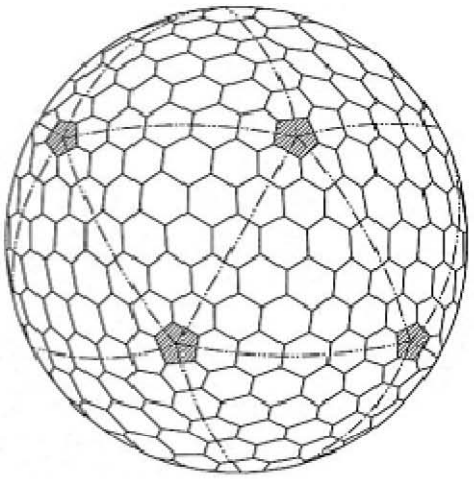

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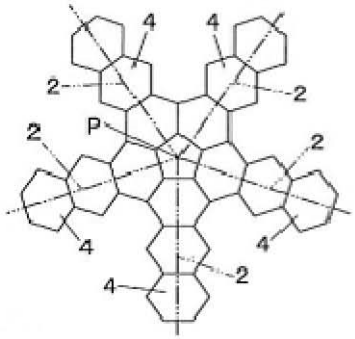

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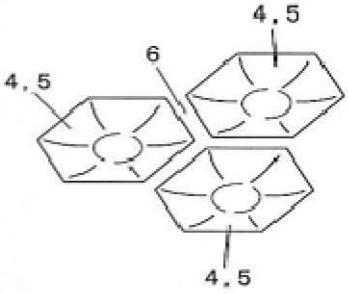


#12

別紙第２　　引用意匠

#13

甲第 1の1 号証

United States Patent [19]

Pattison

[11] Patent Number: 4,991,852

[45] Date of Patent: Feb. 12, 1991

[54] MULTI-PURPOSE GOLF BALL

[76] Inventor: John W. Pattison, 7007 Pine Vista, Houston, Tex. 77092

[21] Appl. No.: 345,166

[22] Filed: Apr. 28, 1989

[51] Int. Cl.[5] A63B 37/14

[52] U.S. Cl. 273/232; 40/327

[58] Field of Search 273/232; 40/327

[56] References Cited

U.S. PATENT DOCUMENTS

878,254	2/1908	Taylor	273/232
4,346,898	8/1982	Badke	273/232

FOREIGN PATENT DOCUMENTS

1005480	2/1977	Canada	273/232
377354	7/1932	United Kingdom	273/232
2156687	10/1985	United Kingdom	273/232

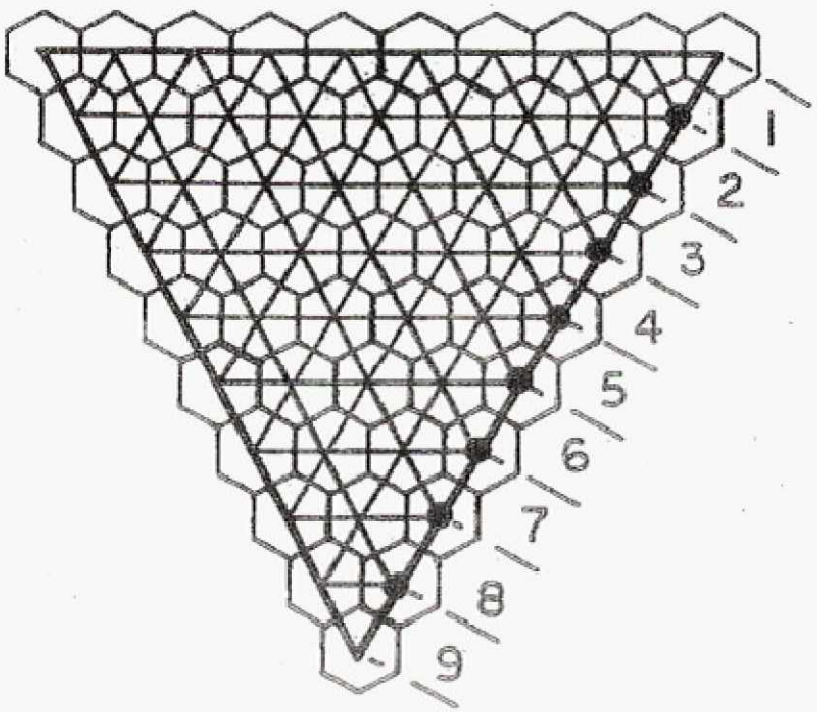
Primary Examiner—George J. Marlo

Attorney, Agent, or Firm—Kenneth A. Roddy

[57] ABSTRACT

A multi-purpose golf ball having 812 concave hexagonal surface depressions arranged in a uniformly arranged geodesic nine-frequency icosahedral pattern over the surface of the ball and each depression having a surface diameter in the range of from 0.090 inches to 0.140 inches and a depth in the range of from 0.002 inches to 0.014 inches.

1 Claim, 2 Drawing Sheets



#1

Appendix No. 1 The Registered Design

Article to the design: Golf Ball

Description Article to the design

As shown in a reference front view, a reference rear view, a reference top view, a reference right side view and a reference explanation view, a golf ball to which the design is applied provides pentagonal dimples 7 (shown by hatching in these reference views) on intersection points P of virtual section lines 2 (shown by two-dot chain lines in these referential views) obtained by projecting sides of an icosahedron on a spherical surface, and provides multiple hexagonal dimples 4 between which lands 6 are placed on five virtual section lines 2 extending from the intersection points P and provides multiple hexagonal dimples 5 between which the lands 6 are placed in the areas of spherical equilateral-triangles 3. The lands refer to land parts left between the dimples when the dimples are provided on the spherical surface, and the width of the land 6 is 0.5 mm. As shown in a reference partial perspective view, the bottom shape of the dimples 4, 5 is a shallow hexagonal pyramid-like concaveness and the deepest part is spherical.

Description of the design

A bottom view is the same as the plane view and thus omitted. A left side view is symmetrical to the right side view and thus omitted.

#2 Front View
#3 Rear View
#4 Top View
#5 Right Side View
#6 Reference Front View
#7 Reference Rear View
#8 Reference Top View
#9 Reference Right Side View
#10 Reference Explanation View
#11 Reference Partial Perspective View
#12 Attached No. 2 Cited Design
#13 Evidence A No. 1-1

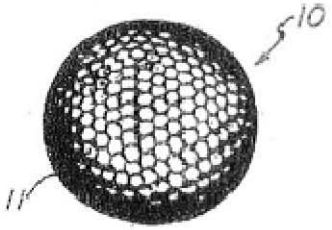


FIG. 1

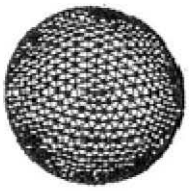


FIG. 5

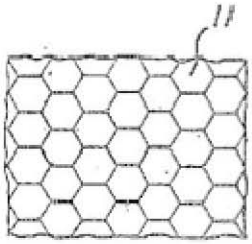


FIG. 2
(PRIOR ART)

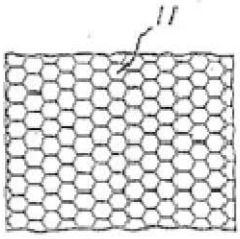


FIG. 3

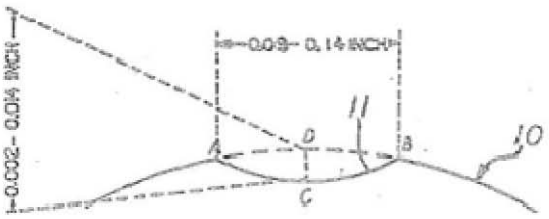


FIG. 4

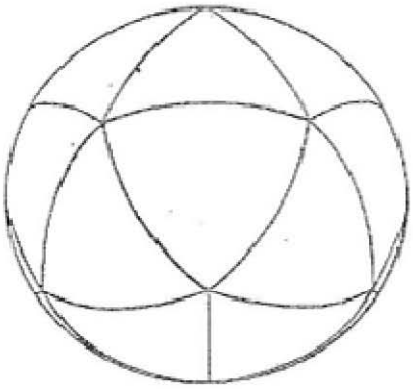


FIG. 6

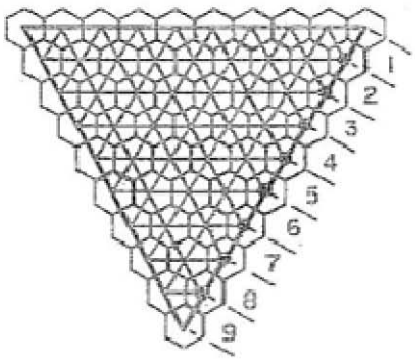


FIG. 7

(7)

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is an elevation of the multi-purpose golf ball in accordance with the present invention.

FIG. 2 is an illustration of a portion of the cover of a conventional golf ball of the prior art projected in a flat plane.

FIG. 3 is an illustration of a portion of the cover of the present multi-purpose golf ball projected in a flat plane.

FIG. 4 is an enlarged cross sectional view of one depression of the present golf ball.

FIG. 5 is a schematic illustration of a sphere divided into a regular geodesic nine-frequency icosahedron.

FIG. 6 is a diagramatic illustration of a sphere divided into twenty main triangles based on an inscribed icosahedron pattern.

FIG. 7 illustrates one of the twenty main icosahedral triangles having each side divided into nine parts to produce a total of 812 vertices uniformly distributed over the entire spherical surface of the ball.