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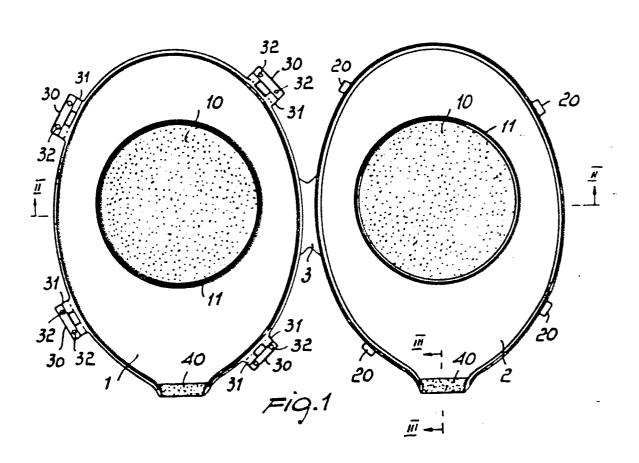
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(54) Case structure, particularly for tennis rackets and the like.

(57) A case for tennis rackets comprises two substantially rigid half-shells (1,2) defining therebetween, in a closed condition thereof, a housing for the racket cord network (50), on the facing sides of the half-shells soft material projecting elements (10) being provided effective to engage the racket cord network (50) thereby providing a close fit of the case to the racket.



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This invention relates to a case structure, particularly for tennis rackets and the like.

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As is known, there are currently marketed various types of tennis racket cases which, in their commonest form, comprise a canvas or the like enclosure provided, at an edge portion thereof, with a zip closure opening; said enclosure is fitted onto the racket to enclose the frame portion thereof which supports the cords, and secured to the racket by closing the zipper.

The type of case just described, although widely employed, obviously falls short of providing adequate protection for the racket, because the case itself cannot absorb incidental impacts, which are instead transmitted directly to the racket frame, to the risk of damaging the frame itself.

Moreover, continued rubbing of the frame against the racket case may result in time in wearing of both the case and racket.

Another disadvantage is that conventional tennis racket cases provide no adequate protection from moisture, which can adversely affect the racket cords, especially when formed from animal gut.

This invention sets out to eliminate the drawbacks encountered in the past by providing a case structure particularly for tennis rackets and the like, which can offer adequate protection for the racket frame, also in the event of shocks, and which involves no



continuous contacting between the case and racket.

Within that general aim, it is an object of this invention to provide a case structure for tennis rackets which, being rigid, is capable of preserving in an absolutely reliable manner the integrity of the racket frame.

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It is a further object of the invention to provide a case structure which is extremely simple in construction, it being formable in practice from a single plastics material molding.

Another object is to provide a case structure which can be easily manufactured from readily available materials, and which is highly competitive from a merely economical standpoint.

These and other objects, such as will become apparent hereinafter, are all achieved by a case structure particularly for a tennis racket and the like, according to the invention, which is characterized in that it comprises first and second half-shells of substantially rigid construction and associable with each other to define a housing for the cord network portion of said racket, on the facing sides of said half-shells there being provided soft foam material projecting elements adapted for engaging said racket cord network to provide a close fit between said case and racket.

Further features and advantages will be more clearly understood from the following detailed



description of a case structure particularly for tennis rackets and the like, illustrated by way of example only in the accompanying drawings, where:

Figure 1 shows schematically the instant case, as viewed from the inside in the open condition thereof;

Figure 2 is an illustrative sectional view, taken along the line II-II of Figure 1;

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Figure 3 is a sectional view taken along the line III-III of Figure 1;

Figure 4 shows this case, as viewed from the outside;

Figure 5 is a cross-sectional view of the case as fitted to a tennis racket; and

Figure 6 is a detail sectional representation of the closure members.

With reference to the cited drawing figures, the case structure for tennis rackets and the like implements comprises a first half-shell 1 and a second half-shell 2, both having the usual oval shape and being associable with each other to define a housing for accommodating the racket frame therein, thus enclosing the cord network area of the racket.

The cited half-shells, 1 and 2, are formed from a substantially rigid plastics material and exhibit the feature of being obtainable as a single piece, to this end the half-shells being joined to each other by a weakened section 3, which acts in practice as a hinge element for folding the shell halves onto each other for mutual association.



Advantageously, to facilitate the mating of the first half-shell 1 and second half-shell 2, there is provided a male stepped ridge 4 which is intended for engaging a female step 5 correspondingly formed on the other shell half.

A peculiar feature of the invention is that, on the mutually facing sides of said half-shells, 1 and 2, there are provided projecting elements which comprise a pad 10 made of a foamed plastics material and having preferably a disk-like shape.

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On each inside side or face of the half-shells 1,2, there is further defined a socket for receiving the pads 10, which socket comprises an annularly extending ridge 11, which in practice restrains each soft foam pad 10 laterally.

With the half-shells in their closed condition, the pads 10 engage with the cord network 50 of the racket 51, to function in practice as a soft gripping element holding the racket secured in its case by just engaging the cord network thereof. Thus, the racket frame never contacts in practice the case inner walls, thereby the association between the case and racket only involves the cord network area, whereat soft pads 10 are provided which cannot damage the cords in any way.

The pads 10, in addition to serving as gripping elements as explained hereinabove, have also the very important function of being hygroscopic, thereby they are enabled to absorb any moisture present on the cords as due to using the racket



on sodden ground or to the nature of the place where the racket happens to be.

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To make the closure of the case a stable one, there are provided male closure members formed on one of the half-shells, and on the half-shell 2, with reference to the drawings, each comprising a lug 20 having an enlarged rim 21 which protrudes sideways from one of the half-shells. More specifically, four such lugs 20 are provided which are so spaced apart from one another as to accurately clamp the entire periphery of the mating area between the first half-shell 1 and second half-shell 2, as will be explained more clearly hereinafter.

With said lugs 20 acting as the male closure members, there engage corresponding female closure members which are formed on the other half-shell and comprise a cross-piece 30 connected to the shell via a pair of elastic ears 31 spaced apart from each other by a distance substantially the same as the width of the lugs 20, thereby, during the closing step, the cross-piece 30 can be led over the lug 20 and enlarged rim 21 to provide a stable closure.

Moreover, on one side or face of the crosspiece 30 facing the half-shell, there are provided resting feet 32 which hold in practice the crosspiece itself spaced apart or separated from the half-shell during the closure step to facilitate the gripping thereof during the opening step.

It should be further added that the half-shells are so constructed as to define, once they



have been associated together, an opening for the passage of the racket handle therethrough, and at this area, there are provided paddings 40, also formed from a soft foamed material, which engage the handle of the racket.

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The paddings 40 hold in position the racket handle to avoid inconvenient rubbing noise, while having also the function of sealing to the outside the racket receiving cavity, such as to prevent internal moisture leakages.

The use of the case according to the invention is extremely simple: in fact, it will be sufficient to place the racket with its cord network above one of the pads 10, then turn the two half-shells over each other such that their respective pads engage the racket cord network, thus completing the association of the case with the cord network.

Then, it will be enough to close the various closing elements by engaging the cross-piece 30 in the corresponding lugs.

From the foregoing description, it will be appreciated that the invention achieves its objects, and in particular the fact is stressed that the racket frame never contacts the case, by virtue of the case being clamped, through the pads 10, onto the racket cords, thus avoiding any rubbing action of the case against the racket.

Furthermore, the provision of hygroscopic elements in the form of the pads 10 allows moisture to be removed from the cords to prevent any



deterioration thereof.

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It should be noted, moreover, that the cited raised elements engaging the cords of the racket could also be protruding ribs or the like, as formed integral with the inner sides of the shell halves.

In practicing the invention, the materials used, although the best results are expected to be obtained through the utilization of a plastics material, and the dimensions and contingent shapes may be any ones to suit individual requirements.



CLAIMS

1. A case structure, particularly for a tennis 1 racket and the like, characterized in that it 2 comprises first and second half-shells of substan-3 tially rigid construction and associable with each other to define a housing for the cord network portion of said racket, on the facing sides of said 6 half-shells there being provided soft foam material 7 projecting elements adapted for engaging said 8 racket cord network to provide a close fit between 9 10 said case and racket. 2. A case structure, particularly for tennis 1 rackets and the like, according to Claim 1, 2 characterized in that said projecting elements are 3 formed from a soft foam material. 4 3. A case structure, particularly for tennis 1 rackets and the like, according to Claim 1, 2 characterized in that said projecting elements are 3 of a hygroscopic type. 4 4. A case structure, particularly for tennis 1 rackets and the like, according to Claim 1, 2 characterized in that said first and second half-3 shells are an integral construction and joined 4 together through a weakened section adapted to 5 function as a hinge element. 6 5. A case structure, particularly for tennis 1 rackets and the like, according to Claim 1, 2 characterized in that said soft foam material 3

projecting elements are received in a corresponding

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seat or socket defined on the inner sides or faces
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     of said case by a rim extending all along a
     substantially circumferential path.
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          6. A case structure, particularly for tennis
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     rackets and the like, according to Claim 1,
     characterized in that it comprises, on one of said
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4
     half-shells, a male closure means effective to
5
            associated with corresponding female closure
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     means provided on the other of said half-shells,
7
     said male closure means comprising a lug formed
8
     with an enlarged rim protruding laterally from one
     of said half-shells, said female closure means
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     comprising a cross-piece connected to one of said
11
     half-shells through flexible ears, said flexible
12
      ears being spaced apart by a distance substantially
                 or greater than the
                                         width of
      equal
             to
13
      said lug.
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           7. A case structure, particularly for tennis
 1
      rackets and the like, according to Claim 6, character-
 2
      ized in that said cross-piece is provided, on one face
 3
      thereof, with feet adapted for resting on one of
 4
      said hlaf-shells, in the closed position, to hold
 5
 6
      said cross-piece separated from the respective
      half-shell such as to facilitate the manual
 7
      gripping thereof for opening.
 8
           8. A case structure, particularly for tennis
 1
      rackets and the like, according to Claim 1,
 2
      characterized in that said half-shells define
 3
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an area for the passage of the racket handle

therethrough, there being provided at said area

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- 6 soft foam material paddings adapted for contacting
- 7 the racket handle to keep in position said racket
- 8 and prevent internal moisture leakages.
- 1 9. A case structure, particularly for tennis
- 2 rackets and the like, according to Claim 1,
- 3 characterized in that said first and second half-
- 4 shells are provided, on the matching edges thereof,
- 5 with respectively a male stepped ridge or raised
- 6 portion and a female stepped ridge adapted for
- 7 mutual engagement.



