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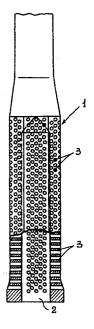
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- 54) Tennis racket handle structure.
- The handle is provided, starting from the bottom end whereof, with an axially extending hole (2), of given size, and through its side wall, with a plurality of small radially extending holes (3), effective to communicate the axially extending hole with the outside, the axially extending hole (2) having a round cross-section and extending for a length related to the user hand palm width.



The present invention relates to a tennis racket handle, provided with an axially extending hole communicating to the outside through a plurality of radially extending small holes.

As it is known, for properly playing tennis, it is necessary to provide a suitable firm gripping between the user hand and racket handle.

Also known is the fact that the adhesion between the user hand palm and the racket handle progressively decreases as the moisture due to the user hand exudation increases.

In this connection it should also be pointed out that the tennis racket handles are generally provided with outer coatings effective to improve the gripping characteristics between the racket handle and user hand.

The mentioned coatings, however, prevent the palm skin from properly exudating and are not able of providing a proper gripping.

Accordingly, the task of the present invention is to overcome the above mentioned drawback, by providing such a tennis racket handle which is effective to improve the gripping characteristics by the user hand, while affording the possibility of obtaining a proper exudation of the hand.

The mentioned task, as well as yet other objects which will become more apparent thereinafter, are achieved by a tennis racket handle characterized in that it is provided, starting from one end thereof,

with an axially extending hole, of suitable size, and in that, through the side wall thereof, there are formed a plurality of small through radially extending holes effective to communicate said axially extending hole with the outside.

In particular, inside the base portion of the handle a small fan or aspirator may be provided, effective to promote the air exchange within the mentioned axially extending hole.

Further characteristics and advantages of the tennis racket handle according to the present invention will become more apparent thereinafter from the following detailed description of a preferred embodiment thereof, being illustrated by way of an example and not of limitation, in the figures of the accompanying drawing, where:

fig.l illustrates a longitudinal crosssectional view of the tennis racket handle according to the present invention;

fig.2 is a bottom view illustrating that same racket handle:

fig.3 is a cross-sectional view illustrating the bottom portion of the handle, with the latter including a ventilating device.

With reference to the figures of the accompanying drawing, the tennis racket handle according to the present invention, generally indicated at 1, is provided, starting from the bottom, with an axially extending hole 2, of substantially round cross-section,

and of suitable diameter, which extends for a given length, related to the width of the hand palm.

Moreover, at the side wall of the racket handle, there are formed a plurality of small radially extending through holes, indicated at 3, which are effective to allow for said axially extending hole 2 to communicate with the outside.

Furthermore, into the bottom portion of the hole 2 a small electric motor 4 may be inserted, supported for example by cross supporting members not specifically shown and supplied by a battery, either of the rechargeable type or not, carrying on its shaft a fan 5.

In this connection it should be noted that the provision of the mentioned radially extending holes, in addition to facilitating the exudation of the user hand palm, is also effective to improve the gripping characteristics of the handle.

Infact, very small portions of the palm skin will penetrate said small holes, thereby providing a firm gripping between the tennis racket handle and user hand palm.

From the above disclosure and the figures of the accompanying drawing the great functionality and use facility characterizing the tennis racket handle according to the present invention will be self-evident.

While the invention has been disclosed with reference to a preferred embodiment whereof, it should be apparent that it is susceptible to many modifications and variations all whereof fall within the scope of the invention itself.

## CLAIMS

1- A tennis racket handle characterized in that it is provided, starting from one end thereof, with an axially extending hole (2), of suitable size, and in that, through the side wall thereof, there are formed a plurality of small radially extending through holes (3) effective to communicate said axially extending hole (2) with the outside.

- 2- A tennis racket handle according to the preceding claim, characterized in that said axially extending hole (2) is provided with a round cross-section and extends for a length related to the hand palm width.
- 3- A tennis racket handle according to claim 1, characterized in that it comprises a small electric motor arranged in the bottom portion of said axially extending hole (2)said electric motor (4) being supported by cross supporting members and supplied by a battery, either rechargeable or not, the shaft of said electric motor supporting a ventilating fan (5).
- 4- A tennis racket handle, according to the preceding claims, and substantially as disclosed and illustrated for the intended objects.

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## **EUROPEAN SEARCH REPORT**

 $0\,10\,9367_{\text{\tiny Application number}}$ 

83 83 0213 ΕP

DOCUMENTS CONSIDERED TO BE RELEVANT					
Category		h indication, where appropriate, ant passages	Relevant to claim	CLASSIFICATION APPLICATION (II	
X	* Claims 1, 2	(M. SZAFIANSKI) 2; column 1, lines lines 1-9, 25-31;	1-4	A 63 B	49/08
Х	CH-A- 212 220 * Whole document		1,2		
х	DE-A-2 348 143 * Claims 1, 3;		1,2		
A	GB-A-1 515 460 * Claim 1; page 91-98; figures	ge 2, lines 52-75,	1,2		
A	US-A-3 999 243 (R.H. LA POUR) 3 * Claim; figure 2 *		3	TECHNICAL FIELDS SEARCHED (Int. Cl. <sup>3</sup> )	
		- <b>-</b> -		A 63 B A 63 B	
	The present search report has b	peen drawn up for all claims			
	Place of search	Date of completion of the search	<u> </u>	Examiner	

X: particularly relevant if taken alone
Y: particularly relevant if combined with another document of the same category
A: technological background
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 E: earlier patent document, but published on, or after the filing date
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