



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 17 83 47 93

Classification of the application (IPC):

A63B 53/04, A63B 53/06, A63B 53/00, A63B 69/36, A63B 102/32, A63B 15/00, A63B 53/10, A63B 71/06

Technical fields searched (IPC):

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
A	US 2008305880 A1 (BROWN HORACE [US]) 11 December 2008 (2008-12-11) * paragraphs [0025] - [0045]; figures *	1-3, 7
A	KR 20070091058 A (LEE KWANG RAE [KR]) 07 September 2007 (2007-09-07) * figures *	1-3, 7
A	US 4809977 A (DORAN BRIAN A [US] ET AL) 07 March 1989 (1989-03-07) * columns 2-4; figures *	1-3, 7
A	US 3806129 A (BURROWS H) 23 April 1974 (1974-04-23) * column 2; figures *	1-3, 7

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search Munich	Date of completion of the search 29 January 2020	Examiner Herry, Manuel
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CATEGORY OF CITED DOCUMENTS

X: particularly relevant if taken alone	P: intermediate document
Y: particularly relevant if combined with another document of the same category	T: theory or principle underlying the invention
A: technological background	E: earlier patent document, but published on, or after the filing date
O: non-written disclosure	D: document cited in the application
& : member of the same patent family, corresponding document	L: document cited for other reasons

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LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-3(completely); 7(partially)

Independent claim 1 specifies that a through hole is formed in the putter head to be stepped such that a fastening bolt pass through the through hole upwards from a bottom face of the putter head, and a cutout portion is formed in the putter face corresponding to the through hole to open a portion of an upper face of the putter head in a hitting direction, a seating face seated on the upper face and supported by an edge of the upper face and a support face are formed to be stepped in a bottom face of the hitting member, a screw-fastening groove is formed in the seating face such that the fastening bolt is coupled to the screw-fastening groove, the sitting member being coupled to the putter head in a state in which the hitting member is seated on the upper face such that a part of the hitting face protrudes beyond the putter face through the cutout portion. These features provide a stronger coupling structure between a putter head and a hitting member, in a compact way (see p.3, l.13-15 of the description). Neither a kit comprising different hitting members, nor various hitting surfaces are foreseen in claim 1. independent claim 3 comprises special technical features (the triangular to octagonal coupling protrusion in combination with the cutout portion and the upward through hole for insertion of the fastening bolt) corresponding to those of claim 1. These features provide a stronger coupling structure between a putter head and a hitting member, in a compact way, and also makes it possible to easily use different hitting faces (see p.3, l.13-15 of the description). Independent claims 1 and 3 are considered to relate to alternative solutions to the problem of providing a stronger coupling structure between a putter head and a hitting member, in a compact way (Rule 43(2)(c) EPC).

2. claims: 4-6(completely); 7(partially)

Independent claim 4 specifies that the putter head includes: a first hitting member formed in a spherical shape corresponding to a shape of a golf ball, the lower end of the shaft being coupled to the first hitting member; a second hitting member formed in the spherical shape corresponding to the shape of the golf ball, and horizontally coupled to a side face of the first hitting member to be located on a straight line with the first hitting member; a third hitting member formed in the spherical shape corresponding to the shape of the golf ball, and horizontally coupled to a side face of the second hitting member to be located on a straight line with the first hitting member and the second hitting member; and a coupling rod configured to integrate the first hitting member, the second hitting member, and the third hitting member by fastening a nut on one end of the coupling rod, which passes through the first hitting member, the second hitting member, and the third hitting member, and fastening the shaft to a remaining end of the coupling rod. These features provide an alternative geometry of a putter head, which is intended to be easily used by left-handed and right-handed users (see p.3, l.9-12 and p.9, l.24-26). Differing hitting faces are not mentioned. Neither a cutout portion in the putter face, nor a stepped support face, nor a triangular to octagonal coupling is mentioned in this claim.

None of the further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for those parts of the European patent application which relate to the first mentioned in the claims, namely claims: 1-3(completely); 7(partially)

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search Munich	Date of completion of the search 29 January 2020	Examiner Herry, Manuel
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ANNEX TO SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on 29-01-2020
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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2008305880	A1	11-12-2008	NONE	
KR 20070091058	A	07-09-2007	NONE	
US 4809977	A	07-03-1989	NONE	
US 3806129	A	23-04-1974	NONE	