(12) UK Patent Application (19) GB (11) 2475484

(43) Date of A Publication

25.05.2011

(21) Application No:

0920172.4

(22) Date of Filing:

18.11.2009

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(51) INT CL: A01K 87/02 (2006.01)

(56) Documents Cited:

GB 2249006 A JP 2010259408 A JP 2000050771 A

JP 100150888 A JP 2007089415 A US 5175952 A

(58) Field of Search:

INT CL A01K

Other: WPI & EPODOC

(54) Title of the Invention: An extendable fishing pole Abstract Title: Extendable fishing rod

(57) An extendable fishing pole 100 comprising a three body members 102, 104, 106 which are able to be connected together. The first body member body member 102 has a cavity for receiving the second body member 104 therein for storage when the second body member 104 is not in use. One end of the first body member is provided with a closure element 112 which functions to close the cavity and to support the second body member when it is stored therein. Once removed the second body member is attached to the opposite end of the first body member to the closure member. The closure member and the first body member may be threaded or slid together and the closure member may support the second body member via an interference fit.



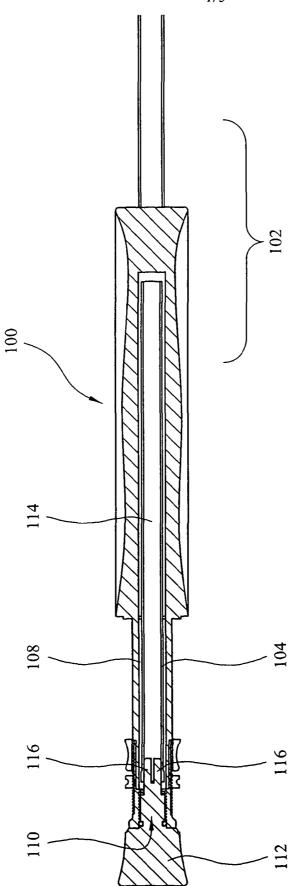
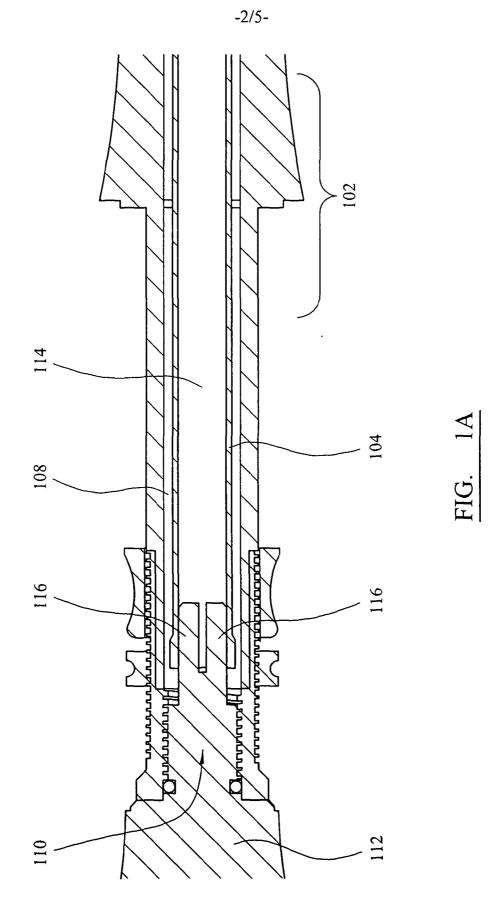
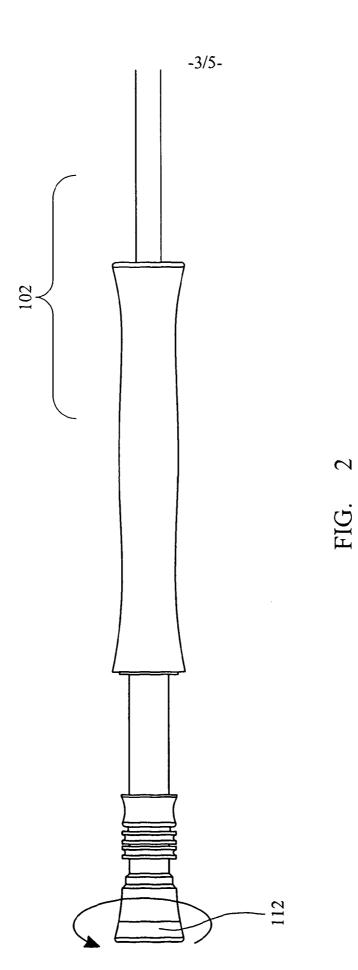
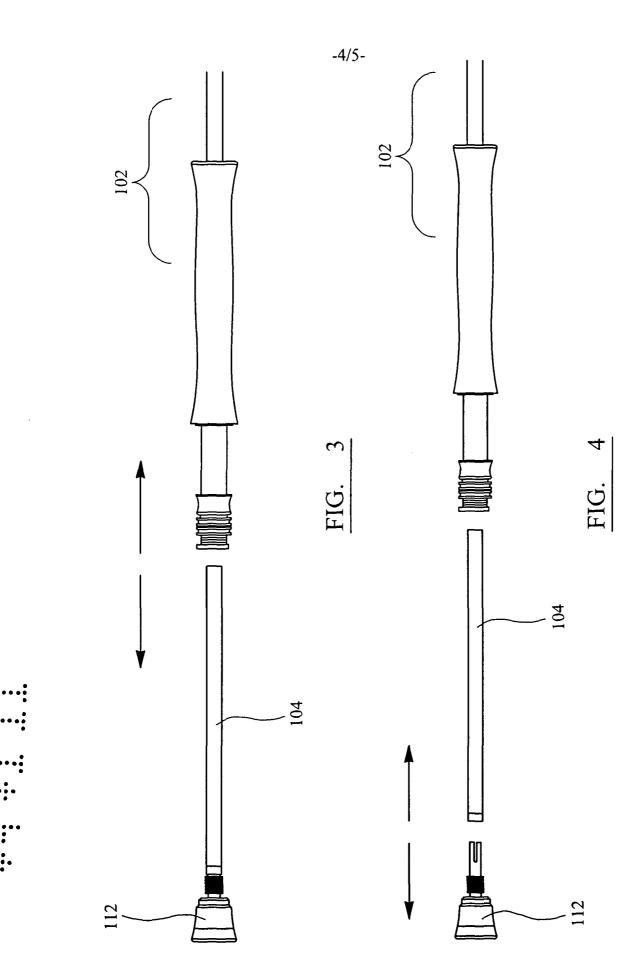
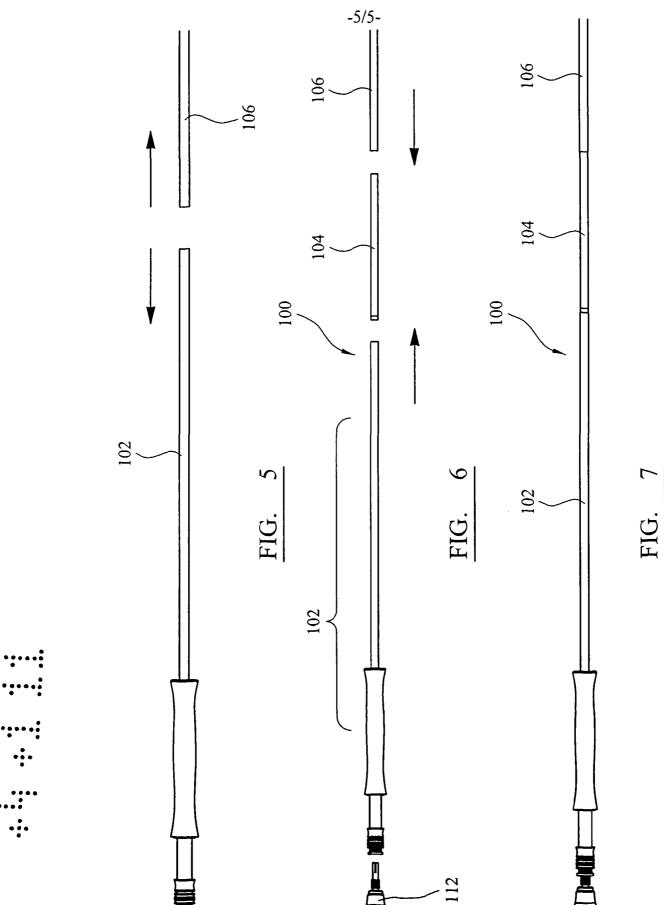


FIG. 1









AN EXTENDABLE FISHING POLE

The present invention relates to an extendable fishing pole, and relates particularly but not exclusively, to a fishing pole adapted to be extended while in use.

Anglers often have fishing poles of different lengths for different types of angling. However, existing fishing poles suffer from the drawback that in order to change from a pole of one length to the other, various components, such as a fishing reel having a fishing line, must be dismounted from a pole of one length and mounted to a pole of another length, which makes changing between lengths of pole time consuming and difficult, especially when an angler may be in a river.

15 Alternatively, rapid changing of lengths of pole necessitates the provision of a spool and line on each pole, which can significantly increase cost.

Preferred embodiments of the present invention seek to 20 overcome the above disadvantages of the prior art.

According to the present invention there is provided an extendable fishing pole comprising a plurality of body members adapted to be connected together, wherein at least one first said body member is adapted to at least partially receive at least one second said body member therein for storage when the second said body member is not in use.

By at least partially storing at least one second body member 30 within a first said body member of a fishing pole provides the advantage of allowing a fishing pole and any additional lengths to be transported, used and stored together with one another even when the additional lengths are not in use. This

provides the further advantage of minimizing the risk of losing any additional lengths of pole when they are not in use and when a fishing pole is in storage or being transported. Also, by allowing a person to access any additional lengths of pole without having to retrieve such additional lengths from a location different from the place to that of the fishing pole, provides the advantage of allowing a person to lengthen their fishing pole while it is in use.

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In a preferred embodiment at least one said first body member defines at least one cavity therein for receiving the second body member.

15 In another preferred embodiment the fishing pole further comprises at least one closure member adapted to close at least one cavity.

In further preferred embodiment at least one said closure 20 member is adapted to either slidably or threadably engage the first body member.

In a preferred embodiment at least one said closure member is adapted to engage at least one said second body member to enable removal of the second body member from the cavity.

This, in addition to facilitating removal, allows the second body member or additional length of pole to be held in a specific position so that it does not move around and impact the interior walls of the cavity as the fishing pole is moved around. This provides the advantage of minimizing damage to the additional length of pole while it is in storage when not in use.

In another preferred embodiment the closure member is adapted to engage the second body member by means of an interference fit.

5 This allows the second body or additional length of pole to be pulled out of the cavity without having to tilt the first body member thereby eliminating the requirement for gravity to facilitate removal of the additional length. This provides the advantage of increasing the ease with which an additional length of pole may be removed from within the cavity.

A preferred embodiment of the invention will now be described, by way of example only and not in any limitative sense, with reference to the accompanying drawings in which:-

Figure 1 is a cross sectional view of a first body member of the fishing pole of the present invention within which is received a second body member;

20 Figure 1A is a magnified view of part of figure 1;

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Figure 2 is a perspective view of the first body member in Figure 1;

25 Figure 3 is a perspective view of the second body member being removed from within the first body member in figure 2;

Figure 4 is a perspective view of the second body member and closure member in figure 3 being separated;

Figure 5 is a perspective view of the first body member of the fishing pole of the present invention being separated from the third body member;

Figure 6 is a perspective view of the second body member in Figure 4 being placed between the first and third body members in Figure 5; and

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Figure 7 is a perspective view of the first, second and third body members in Figure 6 attached to one another.

With reference to Figures 1 to 7, an extendable fishing pole 100 has first, second and third body members 102, 104, 106 which are adapted to be connected together. The first body member 102 comprising the butt of the fishing pole 100 has a cavity defining a first volume 108, the first volume 108 having a first aperture 110 in communication therewith. A second body member 104 which may be used to extend the length of the fishing pole 100 is adapted to be received within the first volume 108 for storage when it is not in use.

The internal surface of the first body member 102 adjacent 20 the first aperture 110 is threaded. This allows the first body member 102 to threadably receive a closure member 112 so as to block the first aperture 110 which prevents the second body member 104 from unintentionally falling out from within the first body member 102.

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With reference to Figure 1A, the second body member 104 is tubular and therefore has a second aperture 114 extending along its centre. The closure member 112 has two prongs 116 which are adapted to extend through the first aperture 110, into the second aperture 114, and engage the interior walls of the second body member 104 via an interference fit. Such an interference fit enables the second body member 104 to be effectively suspended within the first volume 108. The

interference fit also allows the closure member 112 to pull the second body member 104 from within the first volume 108 when the closure member 112 is disengaged from the first body member 102.

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The operation of the extendable fishing pole 100 in Figures 1 to 7 will now be described. The closure member 112 is rotated relative to the first body member 102 and once disengaged is pulled from the first body member 102 a sufficient distance $10\,$ so as to remove the second body member $104\,$ from within the first volume 108, as shown in Figures 2 and 3. The closure member 112 and second body member 104 are then pulled apart before the closure member 112 is re-engaged with the first body member 102 at the users leisure, as shown in Figure 4. 15 Next the first and third body members 102, 106 are disengaged from one another, either threadably or slidably depending on whether they were threadably engaged or engaged via an interference fit, as shown in Figure 5. The second body member 104 is then placed between the first and third body 20 members 102, 106 before they are fixed, either threadably or slidably via an interference fit, to respective ends of the second body member 104, as shown in Figures 6 and 7.

It will be appreciated by persons skilled in the art that the above embodiments have been described by way of example only and not in any limitative sense, and that various alterations and modifications are possible without departure from the scope of the invention as defined by the appended claims. For example, the external surface of the first body member 102 adjacent the first aperture 108 may be threaded. This will allow the first body member 102 to threadably receive a closure member defining an internally threaded volume. Also, a closure member 112 may slidably engage into an interference

fit with the first body member 102 as well as the second body member 104. Furthermore, the second body member 104 may not be tubular and may have any cross sectional shape, and may only have an aperture or apertures which extend partially through it. Lastly, the second body portion 104 may be threaded either internally and/or externally to facilitate attachment to the first and third body portions 102, 106.

CLAIMS

- 1. An extendable fishing pole comprising a plurality of body members adapted to be connected together, wherein at least 5 one first said body member is adapted to at least partially receive at least one second said body member therein for storage when said second body member is not in use.
- 2. An extendable fishing pole according to claim 1, wherein 10 at least one said first body member defines at least one cavity therein for receiving said second body member.
- 3. An extendable fishing pole according to claim 2, further comprising at least one closure member adapted to close at least one said cavity.
 - 4. An extendable fishing pole according to claim 3, wherein at least one said closure member is adapted to either slidably or threadably engage said first body member.

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5. An extendable fishing pole according to claim 3 or 4, wherein at least one said closure member is adapted to engage at least one said second body member to enable removal of said second body member from said cavity.

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- 6. An extendable fishing pole according to claim 5, wherein said closure member is adapted to engage said second body member by means of an interference fit.
- 30 7. An extendable fishing pole substantially as herein before described with reference to the accompanying drawings.



Application No: GB0920172.4 **Examiner:** Mrs Nicola Payne

Claims searched: 1-7 Date of search: 15 March 2011

Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
X	1-6	JP10150888 A (RYOBI) See especially figures and WPI abstract Accession No. 1998-379899 [33]
X	1-6	JP2007089415 A (DAIWI) See especially figures and WPI abstract Accession No. 2007-263314 [26]
X	1 and 2 at least	GB2249006 A (SHIMANO) See especially figures
X	1 and 2 at least	US5175952 A (SHIMANO) See especially figures
X	1 and 2 at least	JP2010259408 A (LEE) See especially figures and WPI abstract Accession No. 2010-P37100 [78]
X	1 and 2 at least	JP2000050771 A (SHIMANO) See especially figures and WPI abstract Accession No. 2000-231194 [20]

Categories:

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X	Document indicating lack of novelty or inventive	A	Document indicating technological background and/or state			
	step		of the art.			
Y	Document indicating lack of inventive step if	P	Document published on or after the declared priority date but			
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	same category.					
&	Member of the same patent family	Е	Patent document published on or after, but with priority date			
			earlier than, the filing date of this application.			

Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC^X :

Worldwide search of patent documents classified in the following areas of the IPC

A01K

The following online and other databases have been used in the preparation of this search report

WPI & EPODOC

International Classification:

Subclass	Subgroup	Valid From
A01K	0087/02	01/01/2006