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(54) **HEAD OF THE DEEP WATER WELL INTEGRATED WITH A PIPE COUPLER**

(57) Head of the deep water well integrated with a pipe coupler, having upper and lower parts, characterised in that both parts: upper part (1) and lower part (2) are provided with a separable pipe coupler (5) that disconnects when both parts (1, 2) are being separated.

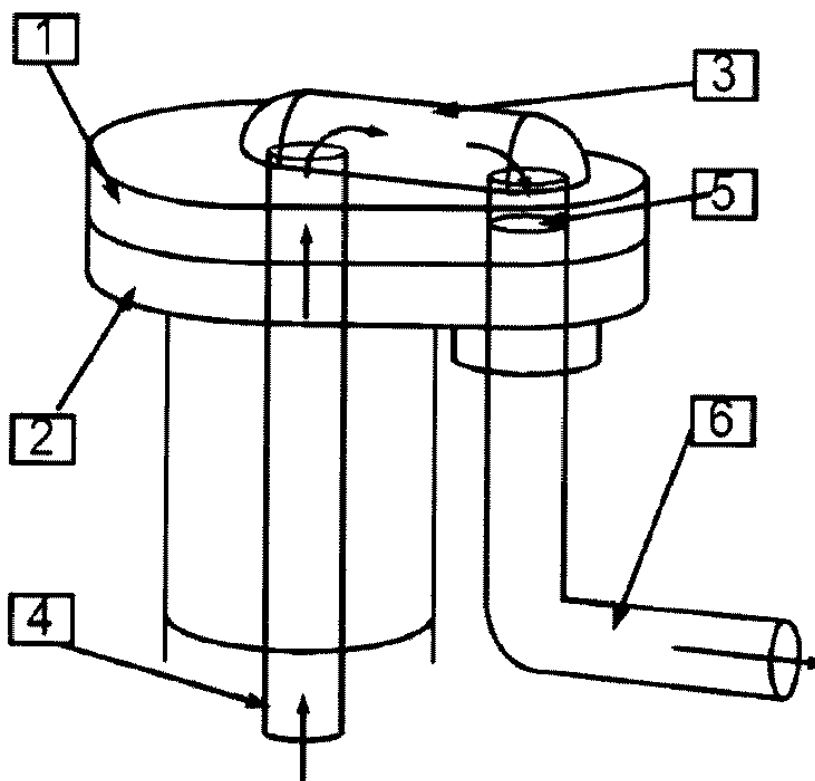


Fig. 1

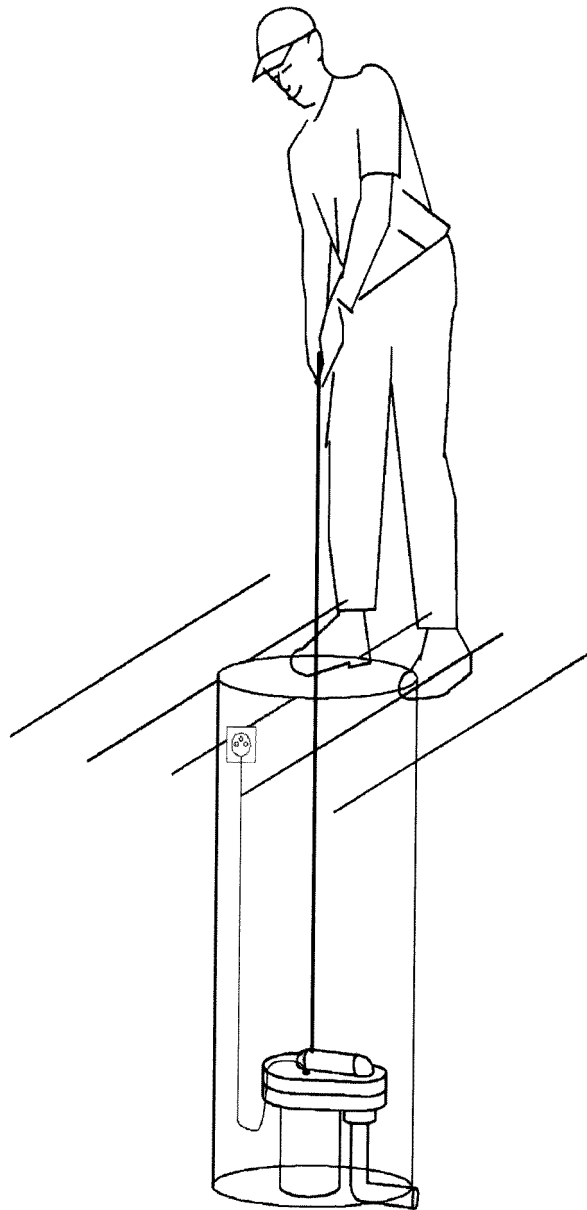


Fig. 3

Description

[0001] The present invention relates to a head of the deep water well integrated with a pipe coupler.

[0002] In the already known solutions a head has, in its upper and removable part, an outlet for connecting a pipeline. Such solution requires dismantling of the pipe connection before opening the head and before taking the pump out of the deep water well. 5

[0003] According to the invention a separable pipe coupler has been installed in the head, in its both, upper and lower, parts. The coupler disconnects simultaneously with the opening of the head when the pump is taken out of the well. Lower part can be fastened to the well pipe permanently while exploiting. 10 15

[0004] The solution under the invention allows for a quick dismounting of the pump. An additional advantage is the possibility to dismount the head of the deep water well / pump from the ground level, if the head is located in an underground casing (trunk). 20

[0005] The subject of the invention is presented in the example drawings which illustrate:

- in the Fig. 1 - the whole head as assembled, in a form of a perspective view. Water direction flow is also indicated, 25
- in the Fig. 2 - horizontal cross-section of the head as disconnected,
- in the Fig. 3 - an example of an application in a small well casing (trunk). 30

[0006] The head is made of plastic, eg. polyethylene. It has a removable upper part 1, fixed lower part 2, upper water duct 3, a pipe 4 on which the pump is suspended, the coupler 5, and a pipe leading to the water intake installation 6. In the upper part 1 there is a rubber O-ring installed in the coupler 5. 35

Claims

1. Head of the deep water well integrated with a pipe coupler, having upper and lower parts, **characterised in that** both parts: upper part (1) and lower part (2) are provided with a separable pipe coupler (5) that disconnects when both parts (1, 2) are being separated. 40 45

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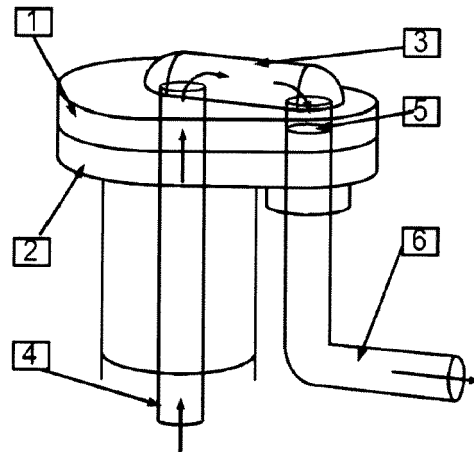


Fig. 1

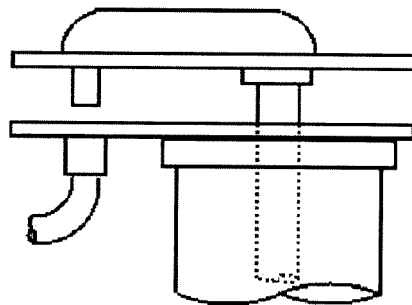


Fig. 2

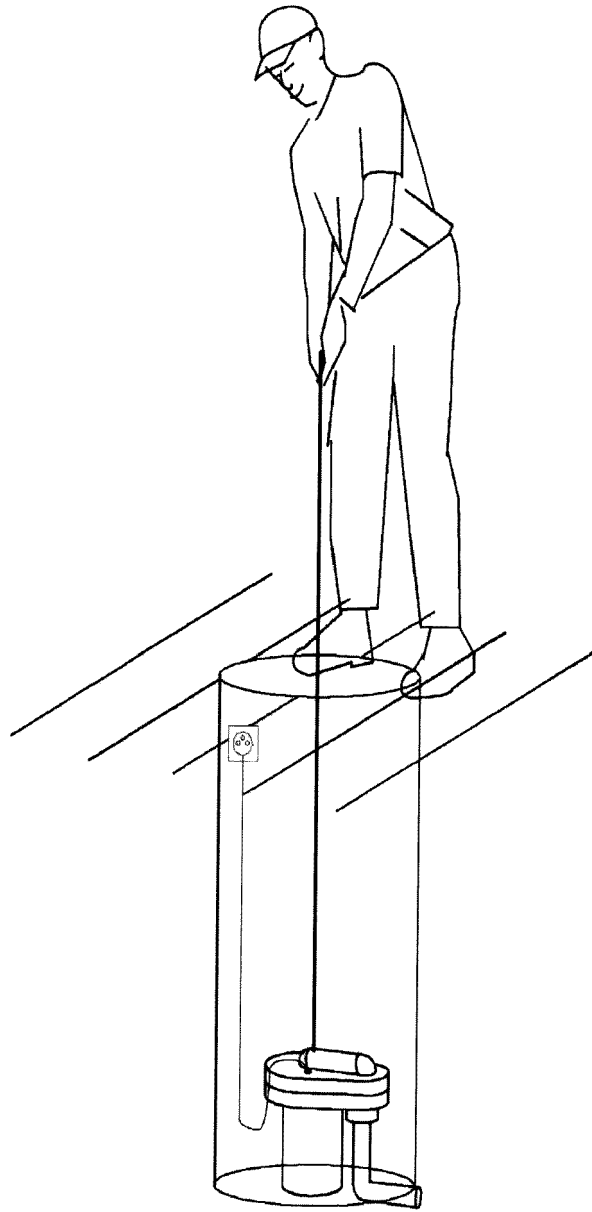


Fig. 3



EUROPEAN SEARCH REPORT

Application Number
EP 15 46 0039

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 4 715 439 A (FLEMING ROY E [US]) 29 December 1987 (1987-12-29) * the whole document * -----	1	INV. E03B3/15 E03B3/16
			TECHNICAL FIELDS SEARCHED (IPC)
			E03B E21B
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 22 January 2016	Examiner De Coene, Petrus
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4715439	A	29-12-1987	NONE

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82