

Title (en)  
ON-LINE FLUID SAMPLING DEVICE

Title (de)  
VORRICHTUNG FÜR DIE ONLINE-FLUIDPROBEENTNAHME

Title (fr)  
DISPOSITIF DE PRELEVEMENT DE FLUIDE EN LIGNE

Publication  
**EP 0879407 A4 20020403 (EN)**

Application  
**EP 96906498 A 19960209**

Priority  
US 9602145 W 19960209

Abstract (en)  
[origin: WO9729353A1] Fluid sampling device (10 and 70) for use in obtaining a precise volume of fluid to be sampled from sealed pressure vessels (34 and 94) equipped with a hydraulic fitting (40 and 104) to which the fluid sampling devices (10 and 90) are connectable. The first embodiment of the device (10) has a fluid float chamber (16) with an internally sealable top opening (30) which opens into an upper fluid passage (28). A floating ball (20) is located in said fluid float chamber (16) and is sized to be sealingly sealable at the top opening (30). A non-floating ball (18) is sized to seat on a lower seat (24) through which fluid can enter the fluid float chamber (16). A vacuum line (54) connects between the top opening (30) and the sealed pressure vessel (34). The second embodiment of the device (70) has a vacuum chamber (72) into which is received a fluid sample container (74). A fluid supply tube (118) connects between the vacuum chamber (72) and the fluid inlet (100). A fluid overflow tube (120) also connects between the vacuum chamber (72) and the vacuum cylinder (94).

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**G01N 1/20**

IPC 8 full level  
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CPC (source: EP)  
**G01N 1/2035** (2013.01); **G01N 2001/2071** (2013.01)

Citation (search report)

- [A] US 5437202 A 19950801 - CLARK JAMES E II [US]
- [A] US 4050315 A 19770927 - MARKFELT REINHOLD S
- [A] US 5121642 A 19920616 - DAVIDOWICZ JOSEPH [US], et al
- [A] US 4945945 A 19900807 - SCHMID CARL E [US]
- [A] US 4832075 A 19890523 - DUBACH ROLAND [CH]
- [Y] US 5301560 A 19940412 - ANDERSON JOHN D [US], et al
- [Y] GB 2040265 A 19800828 - BESTEL DEAN LTD
- [A] US 4651574 A 19870324 - SPENCER R WILSON [US]
- [A] US 2693705 A 19541109 - CASLER JOHN A, et al
- [A] US 5463909 A 19951107 - ELDRIDGE JESS S [US]
- [A] BE 587676 A
- See references of WO 9729353A1

Cited by  
CN108267344A

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