

Title (en)

Device and installation for the cleaning of drains especially in an oil production well.

Title (de)

Vorrichtung und Anlage zur Reinigung von Abzugskanälen, insbesondere bei Erdölbohrlöchern.

Title (fr)

Appareil et installation pour le nettoyage de drains, notamment dans un puits de production pétrolière.

Publication

**EP 0417009 A1 19910313 (FR)**

Application

**EP 90402457 A 19900906**

Priority

FR 8911693 A 19890907

Abstract (en)

[origin: US5086842A] According to one significant characteristic of this invention, the device includes a nozzle (38) for projecting cleaning fluid and connected to a deflector (44) which directs the fluid jet in the direction of the wall of the drain and in particular towards the lower wall of said drain where solid sediments or deposits accumulate. In one embodiment the fluid jet projected by the nozzle (38) and loaded with particles removed from the drain is sucked in via a Venturi effect and the fluid and particles are brought back to the surface.

Abstract (fr)

Selon une caractéristique importante de cette invention, l'appareil comprend une duse ou buse (38) de projection de fluide de nettoyage, associées à un déflecteur (44) qui dirige le jet de fluide en direction de la paroi du drain et en particulier vers la paroi inférieure de ce dernier où les sédiments solides s'accumulent. Selon une variante de la présente invention, le jet de fluide émis par la duse (38), chargé des particules retirées du drain est aspiré par effet Venturi et ramené à la surface.

IPC 1-7

**E21B 41/00; E21B 43/28**

IPC 8 full level

**B05B 1/26** (2006.01); **B08B 9/032** (2006.01); **B08B 9/04** (2006.01); **E21B 21/12** (2006.01); **E21B 37/00** (2006.01); **E21B 41/00** (2006.01)

CPC (source: EP US)

**B05B 1/267** (2013.01 - EP US); **B08B 9/035** (2013.01 - EP US); **B08B 9/0433** (2013.01 - EP US); **E21B 21/12** (2013.01 - EP US); **E21B 37/00** (2013.01 - EP US); **E21B 41/0078** (2013.01 - EP US)

Citation (search report)

- [A] US 4630691 A 19861223 - HOOPER DAVID W [US]
- [AD] US 4744420 A 19880517 - PATTERSON JOHN C [US], et al
- [A] US 3730592 A 19730501 - WENNEBORG W, et al
- [A] US 4671359 A 19870609 - RENFRO JIMMIE J [US]
- [A] GB 355316 A 19310810 - SIDNEY CHARLES SLADDEN

Cited by

EP0623396A1; EP0768436A3; FR2687084A1; FR2678021A1; EP0519793A3; US5280825A; WO9218749A1

Designated contracting state (EPC)

DK GB IT NL

DOCDB simple family (publication)

**EP 0417009 A1 19910313; EP 0417009 B1 19940817**; CA 2024866 A1 19910308; CA 2024866 C 20000919; DK 0417009 T3 19940912; FR 2651451 A1 19910308; FR 2651451 B1 19911031; NO 300282 B1 19970505; NO 903864 D0 19900905; NO 903864 L 19910308; US 5086842 A 19920211

DOCDB simple family (application)

**EP 90402457 A 19900906**; CA 2024866 A 19900907; DK 90402457 T 19900906; FR 8911693 A 19890907; NO 903864 A 19900905; US 57845290 A 19900907