

Title (en)

Safety sleeve and device for wells, particularly for a subterranean reservoir of fluid under pressure.

Title (de)

Sicherheitshülse und Vorrichtung für Bohrlöcher, insbesondere für ein unterirdischen unter Druck stehenden Flüssigkeitsbehälter.

Title (fr)

Manchon de sécurité pour puits communiquant notamment avec une réserve souterraine de fluide sous pression, ensemble de sécurité et procédé d'exploitation de puits associés.

Publication

EP 0457653 B1 19940420 (FR)

Application

EP 91401193 A 19910507

Priority

- FR 9005931 A 19900511
- FR 9100059 A 19910104

Abstract (en)

[origin: CA2042256A1] In order to provide safety in a borehole communicating in particular with a cavity washed out from rock salt and containing gas under pressure, the prior art provides devices suffering from the drawback of reducing the flow sections through the tubes in the borehole. The present invention minimizes this section reduction by means of a hollow cylindrical sleeve closed inside by a plug and including ducts formed in its wall in such a manner as to cross over the flows of fluid taking place respectively in a central tube of the borehole and in the annular space between the central tube and a peripheral tube. In one embodiment of the present invention, the sleeve is sandwiched between portions of the central tube and of the peripheral tube, with safety valves advantageously being mounted on the portions of central tube above and below the sleeve. This provides a safety system suitable for implementing the method of the invention by being connected in line with the central tube and the peripheral tube of the borehole. As a result, both the flow established in the central tube and the flow established in the annular space can be stopped in the event of an accident by the valves without the valves significantly reducing the normal flow section of the central tube. When exploiting a well in "dual completion" mode, this structure also provides significantly larger flow sections than provided by prior art tube systems.

IPC 1-7

E21B 34/10; **E21B 17/18**; **E21B 33/122**; **E21B 43/12**; **E21B 43/14**; B65G 5/00

IPC 8 full level

E21B 17/18 (2006.01); **E21B 33/122** (2006.01); **E21B 34/10** (2006.01); **E21B 43/12** (2006.01); **E21B 43/14** (2006.01); **E21B 43/28** (2006.01)

CPC (source: EP US)

E21B 17/18 (2013.01 - EP US); **E21B 33/122** (2013.01 - EP US); **E21B 34/10** (2013.01 - EP US); **E21B 43/14** (2013.01 - EP US); **E21B 43/28** (2013.01 - EP US); **E21B 43/121** (2013.01 - EP US)

Cited by

CN106246223A; FR2823528A1; CN105672904A; WO02084071A1

Designated contracting state (EPC)

DE FR GB IT NL

DOCDB simple family (publication)

EP 0457653 A1 19911121; **EP 0457653 B1 19940420**; CA 2042256 A1 19911112; DE 69101738 D1 19940526; DE 69101738 T2 19941208; NO 911817 D0 19910510; NO 911817 L 19911112; US 5141057 A 19920825

DOCDB simple family (application)

EP 91401193 A 19910507; CA 2042256 A 19910509; DE 69101738 T 19910507; NO 911817 A 19910510; US 69820991 A 19910510