

Title (en)

Apparatus and method for information transmission by electromagnetic waves

Title (de)

Vorrichtung und Verfahren zur Übertragung von Nachrichten mittels elektromagnetischer Wellen

Title (fr)

Dispositif et méthode de transmission d'informations par onde électromagnétique

Publication

EP 0816632 A1 19980107 (FR)

Application

EP 97401341 A 19970613

Priority

FR 9608256 A 19960701

Abstract (en)

The device for transmitting information between the bottom of a shaft and the surface, where the shaft comprises a series of tubes separated into a lower and an upper part by means (9) of shutting off the internal space in the tubes and annular means (6) of sealing between the tubes and the shaft. The lower part contains a first assembly containing a data acquisition unit and means of transmitting and receiving electromagnetic signals, and a second assembly (2) for transmitting and receiving electromagnetic signals is placed inside the upper part by means of manoeuvre (3) containing at least one electrical or optical link to the surface. The second assembly has electrical contact with the tubes. Also claimed is the method of transmitting information between the bottom of a shaft and the surface using the equipment described above.

Abstract (fr)

La présente invention concerne un dispositif de transmission d'informations de part et d'autre d'une vanne (9) placée dans une graniture de tubes (4) descendue dans un puits, à l'aide de deux ensembles (1;2) émetteur/récepteur d'ondes électromagnétiques placés de part et d'autre de la vanne. Dans le dispositif, l'ensemble (2) situé au-dessus de la vanne (9) est descendu au câble (3) du type "logging" dans l'espace intérieur des tubes (4). L'invention concerne également une méthode de transmission d'informations entre le fond d'un puits et la surface par le moyen d'ondes électromagnétiques. <IMAGE>

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CPC (source: EP US)

E21B 47/13 (2020.05 - EP US); **E21B 47/26** (2020.05 - EP US)

Citation (search report)

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