Title (en)

ANNULAR BARRIER

Title (de)

RINGFÖRMIGE BARRIERE

Title (fr)

BARRIÈRE ANNULAIRE

Publication

EP 4424973 A1 20240904 (EN)

Application

EP 23160016 A 20230303

Priority

EP 23160016 A 20230303

Abstract (en)

The present invention relates to an annular barrier for expansion in an annulus between a first well tubular metal structure and an inner face of a borehole or a second well tubular metal structure for providing zone isolation between a first zone and a second zone of the annulus, the annular barrier having a first axial extension, where the annular barrier comprises a tubular metal part for mounting as part of the first well tubular metal structure, the tubular metal part having an outer face, an expandable metal sleeve surrounding the tubular metal part and having an outer face facing towards the inner face of the borehole or the second well tubular metal structure and an inner face facing the outer face of the tubular metal part, a second axial extension along the first axial extension, and each end of the expandable metal sleeve being connected with the tubular metal part, an annular space between the expandable metal sleeve and the tubular metal part, an expansion opening in the tubular metal part through which fluid may enter the annular space in order to expand the expandable metal sleeve, and wherein the annular barrier further comprises a eutectic material which in a first condition is arranged on the outer face of the tubular metal part in a first axial position different from the second axial extension of the expandable metal sleeve, and in a second axial position and a second axial position and the first axial position and the second axial position and the second axial position. The invention also relates to a downhole system comprising the annular barrier and a downhole tool string comprising a heating unit for heating the eutectic material.

IPC 8 full level

E21B 33/127 (2006.01)

CPC (source: EP) E21B 33/1277 (2013.01)

Citation (search report)

- [Y] EP 3303760 A1 20180411 WELLTEC AS [DK]
- [Y] WO 2016049424 A1 20160331 SCHLUMBERGER CA LTD [CA], et al
- [Y] US 2006037748 A1 20060223 WARDLAW LOUIS J [US], et al
- [A] US 9447655 B2 20160920 ZHAO LEI [US], et al
- [A] CN 215698830 U 20220201 SINOPEC OILFIELD SERVICE CORP, et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

 $\begin{array}{c} \text{Designated extension state (EPC)} \\ \text{BA} \end{array}$

Designated validation state (EPC) KH MA MD TN

DOCDB simple family (publication) EP 4424973 A1 20240904

DOCDB simple family (application) EP 23160016 A 20230303