

Title (en)
Well treatment apparatus and method

Title (de)
Vorrichtung und Verfahren zur Bohrlochbehandlung

Title (fr)
Appareil et procédé de traitement de puits de pétrole

Publication
EP 1416118 A1 20040506 (EN)

Application
EP 03256142 A 20030929

Priority
US 28585902 A 20021031

Abstract (en)
A downhole well treatment system (115) comprises a pipe string (118); well treatment device(s) (110) carried by the pipe string; and well treatment chemical(s) (120) within the well treatment device.

IPC 1-7
E21B 27/02; **E21B 41/02**; **E21B 37/06**; **E21B 43/25**

IPC 8 full level
E21B 27/02 (2006.01); **E21B 37/06** (2006.01); **E21B 41/02** (2006.01); **E21B 43/25** (2006.01)

CPC (source: EP US)
E21B 27/02 (2013.01 - EP US); **E21B 37/06** (2013.01 - EP US); **E21B 41/02** (2013.01 - EP US); **E21B 43/25** (2013.01 - EP US)

Citation (applicant)

- US 5934376 A 19990810 - NGUYEN PHILIP D [US], et al
- US 5797453 A 19980825 - HISAW JACK C [US]
- US 6173780 B1 20010116 - COLLINS IAN RALPH [GB], et al
- US 4357248 A 19821102 - BERKSHIRE DAVID C, et al
- US 4393938 A 19830719 - LAWSON JIMMIE B, et al
- US 5002126 A 19910326 - CARLBERG B L [US], et al

Citation (search report)

- [X] WO 0192685 A1 20011206 - SHELL INT RESEARCH [NL], et al
- [X] EP 1223303 A1 20020717 - CARISELLA JAMES VICTOR [US], et al
- [X] WO 0165055 A1 20010907 - SHELL OIL CO [US], et al
- [X] US 4291763 A 19810929 - SINGER MORTIMER
- [X] US 3199596 A 19650810 - WOOD GEORGE M
- [X] WO 0208562 A2 20020131 - SINVENT AS [NO], et al

Cited by
EP2045437A3; GB2586697A; GB2586697B; GB2586698A; GB2586698B; US7870899B2; US10215018B2; US10689975B2; US9988883B2; US10119368B2; EP3075949A3; AU2011321097B2; EP4112876A3; WO2015105896A1; WO2016137328A1; US9102018B2; US9555509B2; US7861787B2; US9212540B2; EP2045437A2; WO2020239647A3; WO2020239649A3; WO2012057634A1; WO2020239648A3; US8949029B2; US10253619B2; US10669839B2; US10871067B2; US10961842B2; US11674382B2; EP3032028B1

Designated contracting state (EPC)
DE DK FR GB IT NL

DOCDB simple family (publication)
EP 1416118 A1 20040506; AR 041361 A1 20050511; AU 2003243987 A1 20040520; BR 0304253 A 20040831; CA 2444549 A1 20040430; MX PA03009865 A 20040716; NO 20034335 D0 20030929; NO 20034335 L 20040503; US 2004084186 A1 20040506

DOCDB simple family (application)
EP 03256142 A 20030929; AR P030103459 A 20030923; AU 2003243987 A 20030829; BR 0304253 A 20030925; CA 2444549 A 20031010; MX PA03009865 A 20031027; NO 20034335 A 20030929; US 28585902 A 20021031