

Title (en)
Circulating sub

Title (de)
Zirkulationsstück

Title (fr)
Raccord de circulation

Publication
EP 0787888 A2 19970806 (EN)

Application
EP 96306334 A 19960902

Priority

- GB 9517841 A 19950901
- GB 9613894 A 19960703

Abstract (en)

There is provided a circulating sub apparatus (50; 100) having a tubular outer body member (1; 51, 53, 54, 55, 56, 57) and a tubular inner body member (4; 52, 65). The outer body member (1; 51, 53, 54, 55, 56, 57) and the inner body member (4; 52, 65) each have one or more holes (8, 16; 66, 68) substantially transverse to the longitudinal axis of the outer (1; 51, 53, 54, 55, 56, 57) and inner (4; 52, 65) body members. A displacement mechanism produces relative movement between the outer (1; 51, 53, 54, 55, 56, 57) and inner (4; 52, 65) body members such that the outer (1; 51, 53, 54, 55, 56, 57) and inner (4; 52, 65) body members may be repeatably moved between an aligned position, in which the one or more holes (8, 16; 66, 68) on the inner body member (4; 52, 65) are aligned with the one or more holes (8, 16; 66, 68) on the outer body member (1; 51, 53, 54, 55, 56, 57), and an obturated position, in which the one or more holes (8, 16; 66, 68) on the inner body member (4; 52, 65) are obturated by the outer body member (1; 51, 53, 54, 55, 56, 57). <IMAGE>

IPC 1-7
E21B 21/10

IPC 8 full level
E21B 21/10 (2006.01); **E21B 23/00** (2006.01)

CPC (source: EP)
E21B 21/103 (2013.01); **E21B 23/006** (2013.01)

Cited by
EP1214496A4; GB2351511A; GB2351511B; GB2419620A; GB2419620B; GB2405428A; GB2405428B; WO2017220098A1; US6834726B2; US7665545B2; US6854534B2; WO2004106694A1; WO03102367A1; US8844634B2; US8863852B2

Designated contracting state (EPC)
DE DK GB NL

DOCDB simple family (publication)
EP 0787888 A2 19970806; EP 0787888 A3 19980520; EP 0787888 B1 20050302; DE 69634399 D1 20050407; DE 69634399 T2 20051229

DOCDB simple family (application)
EP 96306334 A 19960902; DE 69634399 T 19960902