

Title (en)

Shaped charge liner with precursor liner

Title (de)

Hohlladungseinlage mit Vorlaufeinlage

Title (fr)

Revêtement de charge creuse avec revêtement précurseur

Publication

EP 1345003 A2 20030917 (EN)

Application

EP 03251375 A 20030306

Priority

US 9660902 A 20020312

Abstract (en)

A method to remove well bore fluid from the path of a shaped-charge jet in order to reduce the effect it has on the jet tip. A precursor liner (70) and a primary liner (50) are both pressed in the same housing (12). The primary liner (70) is similar or equivalent to a standard big hole shaped charge liner. The precursor liner (70) is pressed into the apex end (54) of the primary liner (50) and upon detonation is intended to form an initial very fast moving precursor jet to open a path through the fluid of the well bore annulus for the following primary jet. <IMAGE>

IPC 1-7

F42B 1/028; F42B 1/032

IPC 8 full level

F42B 1/028 (2006.01)

CPC (source: EP US)

F42B 1/028 (2013.01 - EP US)

Cited by

US11378363B2; EP2045567A1; CN102947666A; CN101393000A; CN104457433A; US8156871B2; US11753909B2; USD981345S; US11795791B2; DE202015102874U1; US11499401B2; US11340047B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT SE SI SK TR

DOCDB simple family (publication)

EP 1345003 A2 20030917; EP 1345003 A3 20040512; CA 2421671 A1 20030912; US 2003183113 A1 20031002

DOCDB simple family (application)

EP 03251375 A 20030306; CA 2421671 A 20030311; US 9660902 A 20020312