

Title (en)
THERMAL ENHANCEMENT.

Title (de)
THERMISCHE ANREGUNG.

Title (fr)
RENFORCEMENT THERMIQUE.

Publication
EP 0061494 A4 19840928 (EN)

Application
EP 81902877 A 19811005

Priority

- US 19482080 A 19801007
- US 29632181 A 19810828
- US 29632281 A 19810828

Abstract (en)
[origin: WO8201214A1] Thermal treatment apparatus for downhole deployment comprising a combustion stage with an elongated hot wall combustion zone (80) for the substantially complete combustion of the fuel-air mixture and an ignition zone (164) immediately upstream from the combustion zone in which a mixture of atomized liquid fuel and air at or below stoichiometric ratio is ignited; together with a water injection stage (82) immediately downstream from the combustion zone through which essentially particulate free high temperature combustion products flow from the combustion zone and into which water is sprayed. The resulting mixture of steam and combustion products is injected into an oil formation for enhancing the speed and effectiveness of reservoir response due to physical, chemical, and/or thermal stimulation interactions.

IPC 1-7
E21B 43/24

IPC 8 full level
E21B 43/24 (2006.01); **E21B 36/02** (2006.01)

CPC (source: EP)
E21B 36/02 (2013.01)

Designated contracting state (EPC)
DE FR GB NL

DOCDB simple family (publication)
WO 8201214 A1 19820415; DE 3176623 D1 19880225; EP 0061494 A1 19821006; EP 0061494 A4 19840928; EP 0061494 B1 19880120; EP 0200195 A2 19861105; EP 0200195 A3 19870204; FR 2491542 A1 19820409; JP S57501537 A 19820826; NO 821883 L 19820604

DOCDB simple family (application)
US 8101331 W 19811005; DE 3176623 T 19811005; EP 81902877 A 19811005; EP 86105864 A 19811005; FR 8118892 A 19811007; JP 50346381 A 19811005; NO 821883 A 19820604