

Title (en)

Centralizer for casings and drill pipes.

Title (de)

Zentriereinrichtung für Bohr- und Futterrohre ".

Title (fr)

Centreur pour tubages et tiges de forage.

Publication

EP 0512154 B1 19951018 (DE)

Application

EP 91114238 A 19910824

Priority

DE 4113898 A 19910427

Abstract (en)

[origin: US5238062A] A centralizer comprises two spaced-apart support rings connected by spring bows. Each support ring is provided with an internal groove. In use the centralizer is slid onto a pipe provided with two spaced-apart external grooves. When the internal grooves on the support rings overlie the external grooves on the pipe a flexible stop ring is inserted through a window in the support rings into a space defined by the internal groove and the external groove. The internal groove on the support ring extends axially longer than the stop ring by an amount such that the spring bows can be pressed flat against the periphery of the pipe.

IPC 1-7

E21B 17/10

IPC 8 full level

E21B 17/10 (2006.01)

CPC (source: EP US)

E21B 17/1028 (2013.01 - EP US)

Designated contracting state (EPC)

AT DE FR GB IT NL

DOCDB simple family (publication)

US 5238062 A 19930824; AT E129311 T1 19951115; CA 2067061 A1 19921028; DE 4113898 A1 19921029; DE 4113898 C2 19941027; DE 59106735 D1 19951123; EP 0512154 A1 19921111; EP 0512154 B1 19951018; NO 304999 B1 19990315; NO 921602 D0 19920424; NO 921602 L 19921028

DOCDB simple family (application)

US 87164292 A 19920421; AT 91114238 T 19910824; CA 2067061 A 19920424; DE 4113898 A 19910427; DE 59106735 T 19910824; EP 91114238 A 19910824; NO 921602 A 19920424