

Title (en)

Temporarily held open casing filling valve.

Title (de)

Zeitweilig offengehaltenes Fütterrohrfüllventil.

Title (fr)

Vanne de remplissage du cuvelage temporairement tenue ouverte.

Publication

EP 0533369 A1 19930324 (EN)

Application

EP 92307926 A 19920901

Priority

US 76042391 A 19910916

Abstract (en)

An automatic device for allowing downhole floating equipment to fill with well fluid as it is lowered into a well. The device comprises a casing equipment housing (26) including a tubular section having an axial bore therethrough; a valve assembly (24) axially disposed in the axial bore of the tubular section, the valve assembly including a valve body (30) having a valve seat base therein; a guide spider above the valve seat base in the valve body and having a stem bolt bore therethrough; a valve poppet (32) having an upwardly-facing valve surface thereon disposed adjacent the valve seat base; a stem bolt (34) secured to the valve poppet and extending upwardly through the stem bolt bore in the guide spider; and a coil spring (36) disposed about the stem bolt biasing the valve poppet into engagement with the valve seat base; and means (48) for holding said valve poppet open, characterised by a cement sheath (28) surrounding the valve assembly and substantially filling the annular void between the valve assembly (24) and the wall of the bore of the tubular section; and wherein said holding means comprises an automatic self-filling mechanism located in the bottom of the casing equipment having a portion thereof (48) adapted to selectively engage a portion of the valve poppet (32) of the valve assembly to selectively hold the valve poppet open to allow fluids used in said well cementing operation to flow upwardly through said self-filling float device. <IMAGE>

IPC 1-7

E21B 21/10

IPC 8 full level

E21B 21/10 (2006.01)

CPC (source: EP)

E21B 21/10 (2013.01)

Citation (search report)

- [A] US 1811885 A 19310630 - HILL ROWLAND F
- [AD] US 4712619 A 19871215 - STEPP LEE W [US], et al
- [AD] US 3419040 A 19681231 - THIBODEAUX EDWARD J

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EP0709543A3; GB2384543A; GB2384543B; EP0703346A3; US6719003B2; US6659426B2; US10435984B2; US2023069930A1; US12012812B2; WO9525874A1; US10724648B2

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EP 92307926 A 19920901; AU 2450092 A 19920915; BR 9203583 A 19920915; CA 2078421 A 19920916; MX 9205243 A 19920915; NO 923577 A 19920915