



(51) International Patent Classification:  
*E21B 7/08* (2006.01)

(21) International Application Number:  
PCT/US2010/036668

(22) International Filing Date:  
28 May 2010 (28.05.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
61/182,442 29 May 2009 (29.05.2009) US  
12/789,416 27 May 2010 (27.05.2010) US

(71) Applicant (for all designated States except US): **VAREL INTERNATIONAL, IND., L.P.** [US/US]; 1625 West Crosby, Suite 124, Carrollton, TX 75006 (US).

(72) Inventors; and

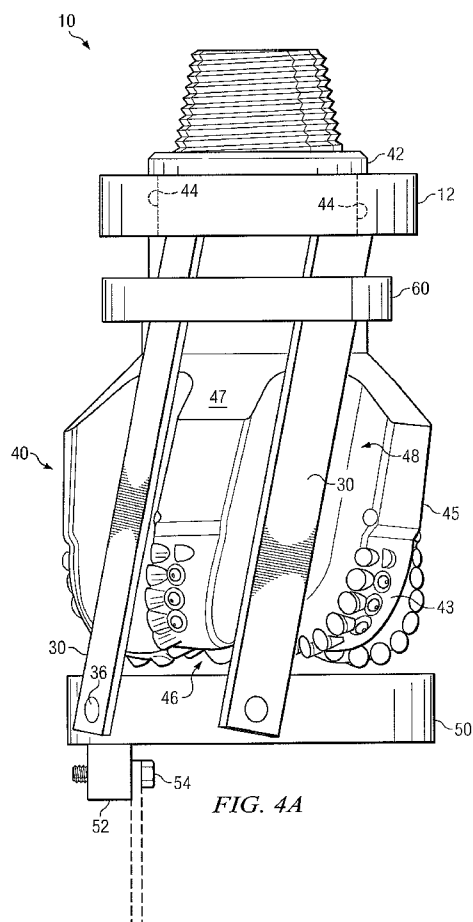
(75) Inventors/Applicants (for US only): **KING, William W.** [US/US]; 13836 Paradise Valley Drive, Houston, TX 77069 (US). **DREWS, Steven W.** [US/US]; 18226 Arbormont Drive, Cypress, TX 77429 (US). **REESE, Michael R.** [US/US]; 2806 Twin Fountains Drive, Houston, TX 77068 (US).

(74) Agents: **SZUWALSKI, Andre M.** et al.; Gardere Wynne Sewell LLP, 1601 Elm Street, Suite 3000, Dallas, TX 75201-4761 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,

[Continued on next page]

(54) Title: WHIPSTOCK ATTACHMENT TO A FIXED CUTTER DRILLING OR MILLING BIT



(57) Abstract: An assembly is provided to attach a whipstock to a mill/drill bit. The assembly includes an upper collar adapted for installation around a shank of the mill/drill bit. At least one connecting member is mounted at a first end to the upper collar. The connecting member extends downwardly from the upper collar and is adapted to fit within a junkslot of the mill/drill bit to which the upper collar is attached. A whipstock attachment structure is mounted to a second end of the at least one connecting member.



KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Declarations under Rule 4.17:**

— *of inventorship (Rule 4.17(iv))*

**Published:**

— *with international search report (Art. 21(3))*

**(84) Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU,