



- (51) **International Patent Classification:**
E21B 10/00 (2006.01) *E21B 10/14* (2006.01)
- (21) **International Application Number:**
PCT/US2011/052763
- (22) **International Filing Date:**
22 September 2011 (22.09.2011)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
12/939,367 4 November 2010 (04.11.2010) US
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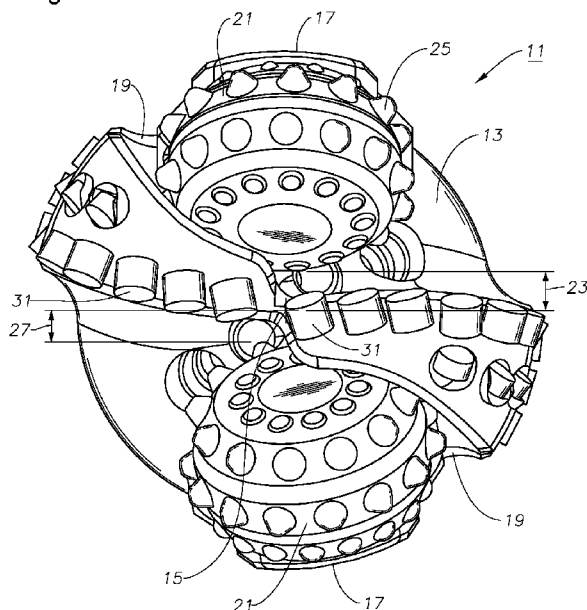
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(81) **Designated States (unless otherwise indicated, for every kind of national protection available):** AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, 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, QA, RO, RS, RU, RW, 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.

[Continued on next page]

(54) **Title:** SYSTEM AND METHOD FOR ADJUSTING ROLLER CONE PROFILE ON HYBRID BIT

Fig. 1



(57) **Abstract:** An earth boring drill bit (11) designed for a specific performance, within a finished product tolerance, using components built to a looser manufacturing tolerance. The bit may be assembled by selecting a leg (17) from a plurality of pre-manufactured legs; selecting a bit body (13) from a plurality of pre-manufactured bit bodies, the bit body having a slot (123) for receiving the leg; placing the leg within the slot; and fixing the leg within the slot within the finished product tolerance by placing one or more shims (200) between the leg and the slot. The shims may be used to adjust an axial position, a radial position, and/or a circumferential position of the leg with respect to the slot. The leg and the bit body may be selected, or produced, to ensure the bit will not meet the specification, given the manufacturing tolerance, without the shims.



(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, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK,

SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

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