

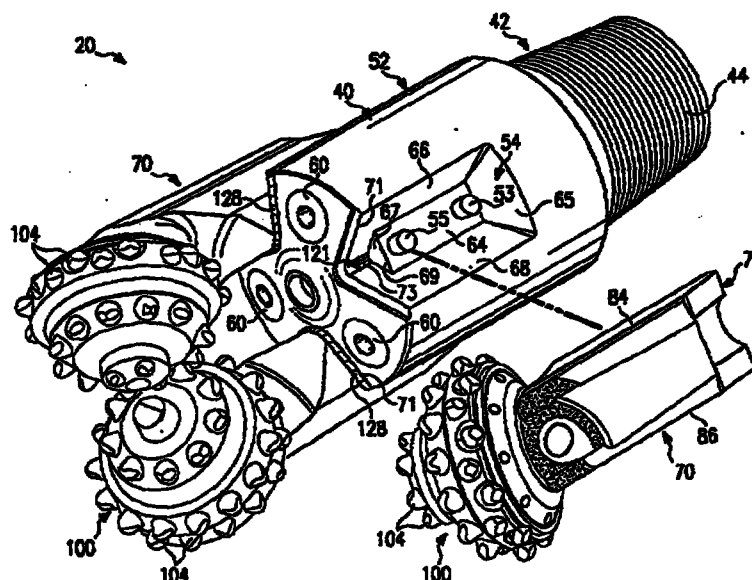


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International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : E21B 10/20	A1	(11) International Publication Number: WO 96/39568 (43) International Publication Date: 12 December 1996 (12.12.96)
(21) International Application Number: PCT/US96/08522 (22) International Filing Date: 3 June 1996 (03.06.96) (30) Priority Data: 08/478,455 6 June 1995 (06.06.95) US (71) Applicant: DRESSER INDUSTRIES, INC. [US/US]; Suite 4100, 2001 Ross Avenue, Dallas, TX 75201-2916 (US). (72) Inventors: BEATON, Michael, Steve; 1501 Fuller Drive, Cedar Hill, TX 75104 (US). BIRD, Jay, S.; 312 Brown Street, Waxahachie, TX 75165 (US). (74) Agent: FELGER, Thomas, R.; Baker & Botts, L.L.P., 2001 Ross Avenue, Dallas, TX 75201-2916 (US).	(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>	

(54) Title: **ROTARY CONE DRILL BIT MODULAR ARM**

(57) Abstract

A drill bit (20) for a modular arm (70) is provided. The modular arm (70) includes an inside surface (76) having first (144) and second (146) angled surfaces whose lower portions form an inwardly projecting wedge (125). A curved throat relief area (87) connects to a lower edge (152) of the wedge (125). A pocket (54) in the drill bit (20) is sized to receive the support arm (70). The pocket (54) includes a wedge-shaped recess (121) sized to receive the wedge (125) of the support arm (70). A triangular weld groove (126) is provided in the convex surface of the bit body (40). A length of weld (128) is applied in the weld groove (126) for firmly securing the support arm (70) to the bit body (40).