

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
4 March 2004 (04.03.2004)

PCT

(10) International Publication Number
WO 2004/018155 A1

(51) International Patent Classification⁷: **B25B 21/00**,
13/00, 13/46

(21) International Application Number:
PCT/AU2003/001057

(22) International Filing Date: 20 August 2003 (20.08.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2002950913 21 August 2002 (21.08.2002) AU
2003900881 26 February 2003 (26.02.2003) AU
0304380.9 26 February 2003 (26.02.2003) GB

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant and

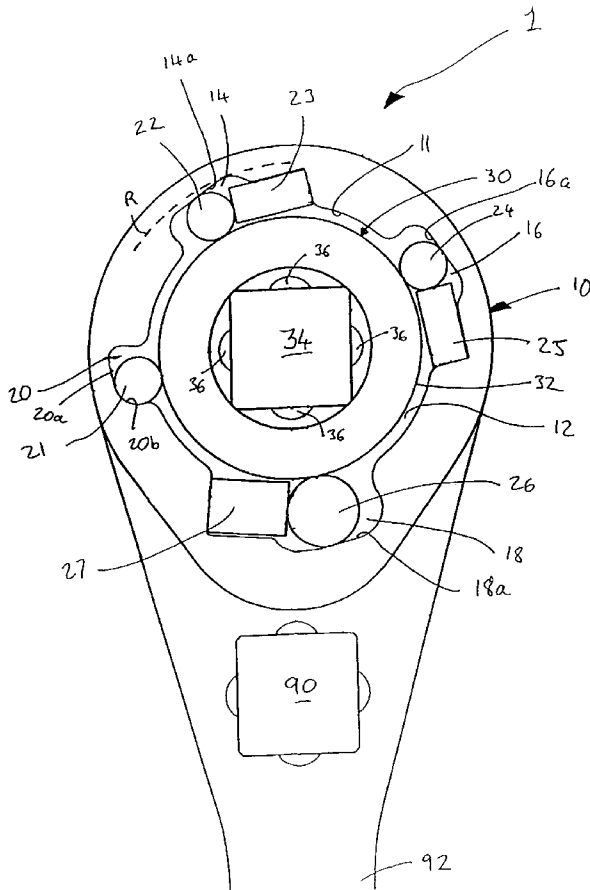
(72) Inventor: **DEIN, Kevin, Arthur** [AU/AU]; 45 Lovett Avenue, Dubbo, New South Wales 2830 (AU).

Published:

— with international search report

[Continued on next page]

(54) Title: TORQUE TRANSMISSION MECHANISM



(57) Abstract: A torque transmission mechanism (1) comprises an outer body (10) defining a cavity (12) and an inner body (30) located at least partially inside the cavity and able to rotate therein. A plurality of rollers (22, 24, 26) located between the outer and inner bodies interact with cam surfaces (14a, 16a, 18a, 20a) so that rotation of the inner body in a first direction is substantially unimpeded but rotation in the opposite direction is prevented or impeded by interaction of rollers with one or more cam surfaces. One of the rollers (18) is larger than at least one other roller and is located in a recess formed in one of the outer and inner bodies. In one embodiment the recess (18) is formed in a part of the outer body which has a greater wall thickness, excluding the effect of the recess than the rest of the outer body, so that the larger roller is accommodated without adding bulk to the outer body.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.