

(51) International Patent Classification:
E21B 23/00 (2006.01)(21) International Application Number:
PCT/US2015/056502(22) International Filing Date:
20 October 2015 (20.10.2015)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
14/521,253 22 October 2014 (22.10.2014) US

(71) Applicant: CAMERON INTERNATIONAL CORPORATION [US/US]; 1333 West Loop South, Suite 1700, Houston, Texas 77027 (US).

(72) Inventors: COCKER III, John J.; Cameron International Corporation, 3505 W. Sam Houston Parkway N., Houston, Texas 77043 (US). VAGHMASHI, Shailesh U.; Cameron International Corporation, 3505 W. Sam Houston Parkway N., Houston, Texas 77043 (US). EMMETT, Jacob C.; Cameron International Corporation, 3505 W. Sam Houston Parkway N., Houston, Texas 77043 (US). GONZALEZ, Randy; Cameron International Corporation, 3505 W. Sam

Houston Parkway N., Houston, Texas 77043 (US). HANSON, Andrew R.; Cameron International Corporation, 3505 W. Sam Houston Parkway N., Houston, Texas 77043 (US). CAVANAGH, James D.; Cameron International Corporation, 3505 W. Sam Houston Parkway N., Houston, Texas 77043 (US). LEVERT, Michael F., Jr.; Cameron International Corporation, 3505 W. Sam Houston Parkway N., Houston, Texas 77043 (US).

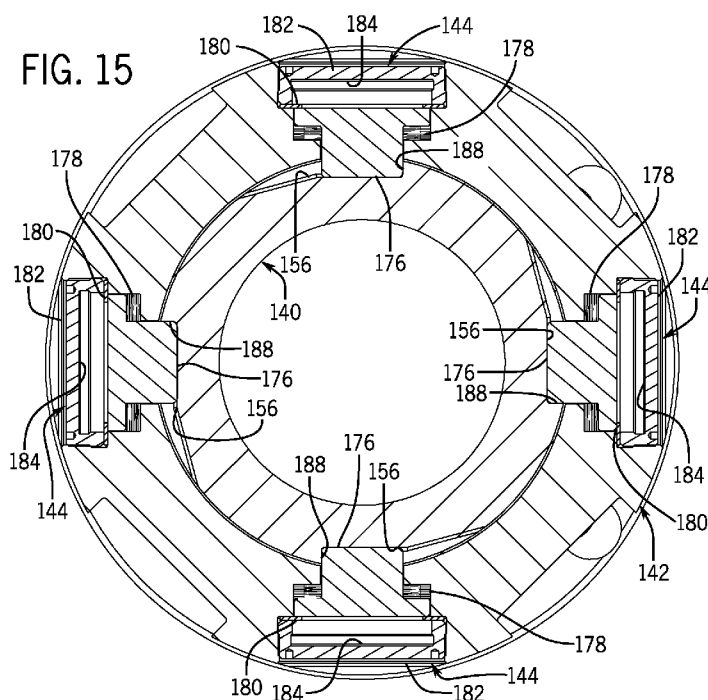
(74) Agent: EUBANKS, L. Lee, IV; Eubanks PLLC, 9720 Cypresswood Dr., Suite 242, Houston, Texas 77070 (US).

(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, BN, 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, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: ROTATING WELLHEAD HANGER ASSEMBLIES



(57) Abstract: Rotating wellhead hanger assemblies are provided. In one embodiment, a wellhead hanger assembly includes a casing hanger (22, 50, 140) and a casing hanger running tool (70, 142) coupled to the casing hanger. An exterior surface of the casing hanger includes a recess (62, 156) and the casing hanger running tool includes a dog (104, 176, 196) that extends inward from the casing hanger running tool into the recess of the exterior surface of the casing hanger. Engagement of the dog with the recess of the casing hanger facilitates synchronous rotation of the casing hanger and its running tool. Additional systems, devices, and methods are also disclosed.



GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, 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, KM, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

Published:

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