

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
14 June 2018 (14.06.2018)



(10) International Publication Number
WO 2018/106436 A1

(51) International Patent Classification:
F01D 25/28 (2006.01) *F01D 21/00* (2006.01)

(21) International Application Number:
PCT/US2017/062618

(22) International Filing Date:
20 November 2017 (20.11.2017)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
15/370,398 06 December 2016 (06.12.2016) US

(71) Applicant: **GENERAL ELECTRIC COMPANY**
[US/US]; 1 River Road, Schenectady, NY 12345 (US).

(72) Inventors: **DEDE, Mehmet, M.**; 1 Neumann Way, Cincinnati, OH 45215 (US). **PRITCHARD, Byron, Andrew, Jr.**; 1 Neumann Way, Cincinnati, OH 45215 (US). **DIWINSKY, David, Scott**; 1 Neumann Way, Cincinnati, OH 45215 (US). **GRADY, Wayne, Ray**; 1 Neumann Way, Cincinnati, OH 45215 (US). **METZ, Marc**; 1 Neumann

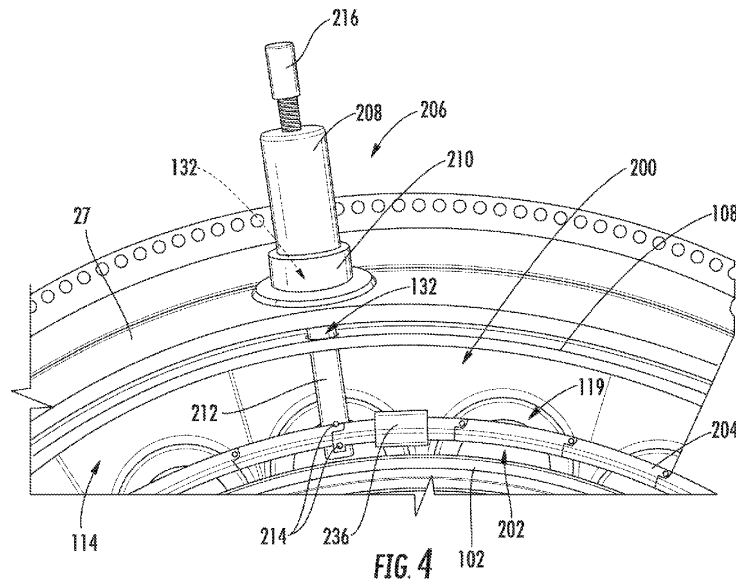
Way, Cincinnati, OH 45215 (US). **WARD, Gary, Lee**; 1 Neumann Way, Cincinnati, OH 45215 (US).

(74) Agent: **KACHUR, Pamela, A.** et al.; General Electric Company, Global Patent Operation, 901 Main Avenue, 3rd Floor, Norwalk, CT 06851 (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, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, 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, 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,

(54) Title: GAS TURBINE ENGINE MAINTENANCE TOOL



(57) Abstract: A maintenance tool for gas turbine engine includes a rail system having a plurality of rail segments insertable through one or more inspection holes of the gas turbine engine for assembly within a core air flowpath of the gas turbine engine. The maintenance tool additionally includes a maintenance head movable along the plurality of rail segments of the rail system for performing maintenance operations within the core air flowpath.

[Continued on next page]

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))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

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