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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
15 February 2007 (15.02.2007)

PCT

(10) International Publication Number
WO 2007/018732 A1

(51) International Patent Classification:
B08B 9/00 (2006.01) ***B08B 7/00*** (2006.01)
B08B 9/027 (2006.01)

(21) International Application Number:
PCT/US2006/022938

(22) International Filing Date: 13 June 2006 (13.06.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/189,347 26 July 2005 (26.07.2005) US

(71) Applicant *(for all designated States except US)*: **CHROMALLOY GAS TURBINE CORPORATION** [US/US]; 4430 Director Drive, San Antonio, TX 78219 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **NGO, Ky, D.** [US/US]; 583 Snapdragon Way, Imperial, CA 92251 (US). **FAIRBOURN, David, C.** [US/US]; 8790 South Tracy Drive, Sandy, UT 84093 (US). **NGUYEN-DINH, Xuan** [US/US]; 1017 Avenida Madero #19, Mexicali, Baja, CA 21100 (US).

(74) Agent: **BITTMAN, Mitchell, D.**; Sequa Corporation, Three University Plaza, Hackensack, NJ 07601 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, 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, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, 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*

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.

(54) **Title:** PROCESS FOR REPAIRING SULFIDATION DAMAGED TURBINE COMPONENTS

(57) **Abstract:** A process is provided for cleaning a surface of an internal cavity of a gas turbine component having sulfidation or sulfur bearing deposits comprising: inserting into the internal cavity a fluoride salt; and heating the fluoride salt and the component in an inert atmospher for a time and at a temperature to clean the sulfidation or sulfur bearing deposits on the surface. In a preferred embodiment the cleaned internal surface is then coated with a metallic coating.

WO 2007/018732 A1