

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
21 October 2004 (21.10.2004)

PCT

(10) International Publication Number
WO 2004/090649 A2

- (51) International Patent Classification⁷: **G05B**
- (21) International Application Number:
PCT/US2004/009939
- (22) International Filing Date: 30 March 2004 (30.03.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
10/407,259 4 April 2003 (04.04.2003) US
- (71) Applicant (for all designated States except US): **TEX-
ACO DEVELOPMENT CORPORATION** [US/US];
6001 Bollinger Canyon Road, 3rd Floor, San Ramon, CA
94583 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **MIRKOVIC,
Vesna, R.** [YU/US]; 2201 Land Street, Pearland, TX
77584 (US). **WHEAT, William, S.** [US/US]; 3413 Crosby
Landing, Missouri City, TX 77459 (US).
- (74) Agents: **TURNER, Frank, C.** et al.; Chevrontexaco Cor-
poration, Law Department, Post Office Box 6006, San Ra-
mon, CA 94583-0806 (US).

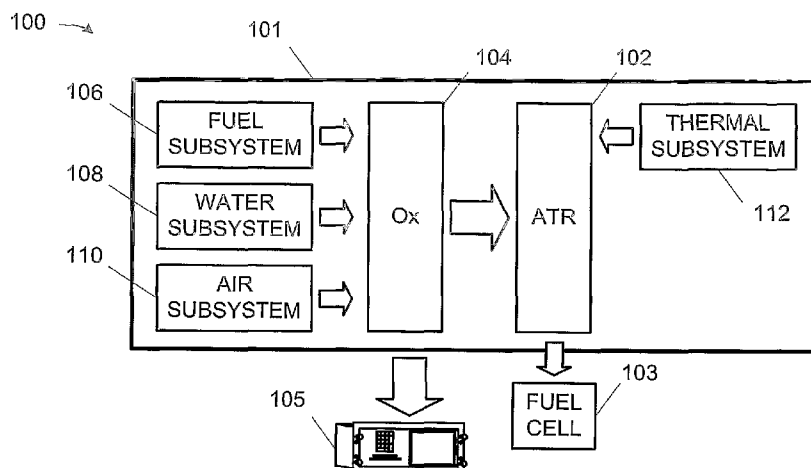
- (81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, 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 (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Euro-
pean (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,
GB, GR, HU, IE, IT, LU, 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).

Published:

— without international search report and to be republished
upon receipt of that report

[Continued on next page]

(54) Title: FIRSTOUT SHUTDOWN TRACING FOR FUEL PROCESSOR CONTROL SYSTEM



(57) **Abstract:** A method and apparatus for determining which condition in a fuel processor has initiated a shutdown of the fuel processor are disclosed. In general, the apparatus generates a plurality of shutdown initiator signals, each corresponding to one of a plurality of shutdown conditions and indicating whether such condition is present. The shutdown initiator signals are read within a predetermined window. At least one of the read shutdown initiator signals indicates that a corresponding first shutdown condition has occurred and identifies the corresponding first shutdown condition as the firstout.

WO 2004/090649 A2



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.