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- (71) **Applicant (for all designated States except US):** JOHNSON CONTROLS TECHNOLOGY COMPANY [US/US]; 915 East 32nd Street, Holland, Michigan 49423 (US).
- (72) **Inventors; and**
- (75) **Inventors/Applicants (for US only):** LI, Yaoyu [CN/US]; 3821 West Dory Drive, Franklin, Wisconsin 53132 (US). SEEM, John, E. [US/US]; 1800 W. Woodbury Lane, Glendale, Wisconsin 53209 (US).
- (74) **Agent:** GUNDERSEN, Jeffrey, S.; FOLEY & LARDNER LLP, 777 E. Wisconsin Ave., Milwaukee, Wisconsin 53202 (US).
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- 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))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

[Continued on next page]

(54) **Title:** EXTREMUM SEEKING CONTROL WITH RESET CONTROL

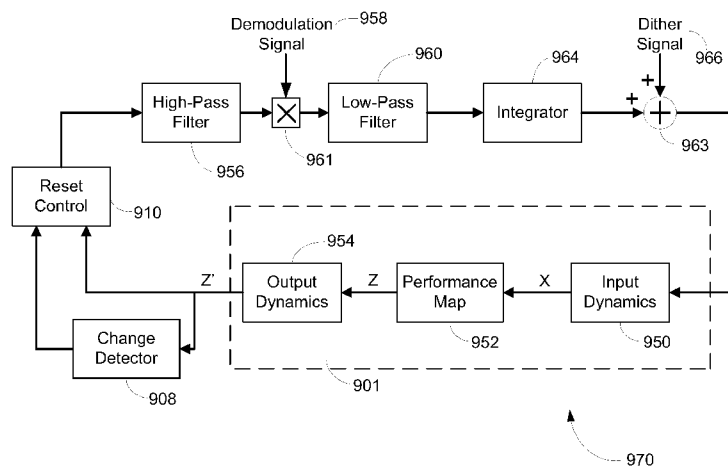


FIG. 6

(57) **Abstract:** A method optimizes a control process for a plant. The method includes operating the plant using an extremum seeking control strategy, detecting an abrupt change in the operation of the plant, and using a circuit to compensate for the abrupt change in the operation of the plant by resetting the extremum seeking control strategy.

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## INTERNATIONAL SEARCH REPORT

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## A. CLASSIFICATION OF SUBJECT MATTER

INV. G05D23/19 G05B5/01 G05B13/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

G05B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages                                    | Relevant to claim No. |
|-----------|---|-----------------------|
| X         | US 2004/164690 A1 (DEGNER MICHAEL W [US]<br>ET AL) 26 August 2004 (2004-08-26)<br>paragraph [0032] - paragraph [0034] | 1,10                  |
| A         | WO 00/68744 A1 (BOEING CO [US])<br>16 November 2000 (2000-11-16)  | 1,10                  |

 Further documents are listed in the continuation of Box C. See patent family annex.

## \* Special categories of cited documents:

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\*E\* earlier document but published on or after the international filing date

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\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040,  
Fax: (+31-70) 340-3016

Authorized officer

Kelperis, K

# INTERNATIONAL SEARCH REPORT

Information on patent family members

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| Patent document cited in search report | Publication date | Patent family member(s) | Publication date                                    |
|--|------------------|-------------------------|---|
| US 2004164690                          | A1               | 26-08-2004              | NONE  |
| WO 0068744                             | A1               | 16-11-2000              | AU 4676200 A 21-11-2000<br>US 6330483 B1 11-12-2001 |