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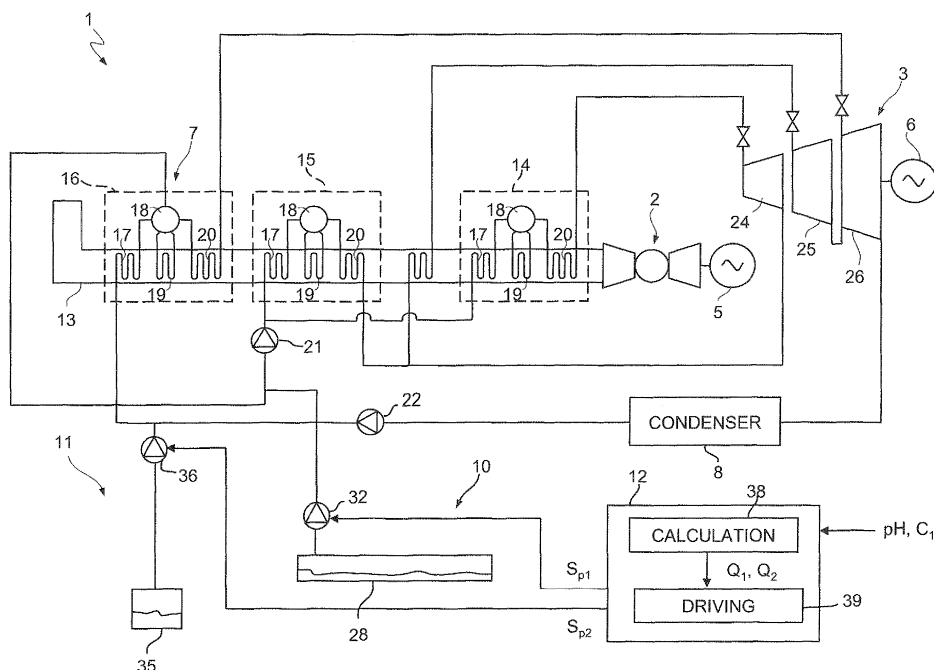
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(54) **Device and method for controlling the injection of an operating fluid and plant for the production of electrical energy comprising said control device**

(57) A device for controlling the injection of at least one operating fluid in an evolving fluid of a plant (1) for the production of electrical energy is provided with: a calculation unit (38) for calculating at least one flowrate ( $Q_1$ ,  $Q_2$ ) of operating fluid to be injected into the evolving fluid on the basis of a detected parameter ( $C_1$ , pH) of the evolving fluid modified by the operating fluid, which is config-

ured for calculating the flowrate ( $Q_1$ ,  $Q_2$ ) of operating fluid to be injected according to a first mode when the detected parameter ( $C_1$ , pH) is lower than a given threshold value ( $C_{TS}$ ,  $pH_{TS}$ ) and according to a second mode when the detected parameter ( $C_1$ , pH) is higher than the threshold value ( $C_{TS}$ ,  $pH_{TS}$ ); and a driving unit (39) for driving at least one operating fluid injection pump (32, 36) on the basis of the flowrate ( $Q_1$ ,  $Q_2$ ) of operating fluid calculated.





## EUROPEAN SEARCH REPORT

Application Number  
EP 08 42 5366

| DOCUMENTS CONSIDERED TO BE RELEVANT  |  |  |   |
|--|--|--|---|
| Category   | Citation of document with indication, where appropriate, of relevant passages  | Relevant to claim  | CLASSIFICATION OF THE APPLICATION (IPC) |
| X  | EP 0 777 036 A1 (ASEA BROWN BOVERI [CH])<br>4 June 1997 (1997-06-04)<br>* column 4, line 16 - line 44; figure 1 *  | 1,2,19,20  | INV.<br>F22B37/02<br>F01K23/10          |
| X  | DE 197 36 885 A1 (SIEMENS AG [DE])<br>4 March 1999 (1999-03-04)<br>* column 4, line 16 - line 59; figures 1,2 *  | 1,2,19,20  |   |
| E  | WO 2009/138216 A2 (HITACHI POWER EUROPE GMBH [DE]; GUENES SENER [DE]; TEUTENBERG ULRICH []) 19 November 2009 (2009-11-19)<br>* page 12, line 30 - page 15, line 15; figure 1 * | 1-6, 8-12,14, 19,20  |   |
|  |  |  | TECHNICAL FIELDS SEARCHED (IPC)         |
|  |  |  | F01K<br>F22B<br>C02F                    |
| The present search report has been drawn up for all claims   |  |  |   |
| Place of search<br><b>Munich</b>   |  | Date of completion of the search<br><b>7 December 2010</b> | Examiner<br><b>Coquau, Stéphane</b>     |
| <p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone<br/>Y : particularly relevant if combined with another document of the same category<br/>A : technological background<br/>O : non-written disclosure<br/>P : intermediate document</p> <p>T : theory or principle underlying the invention<br/>E : earlier patent document, but published on, or after the filing date<br/>D : document cited in the application<br/>L : document cited for other reasons<br/>&amp; : member of the same patent family, corresponding document</p> |  |  |   |

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EPO FORM 1503 03.82 (F04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
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EP 08 42 5366

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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