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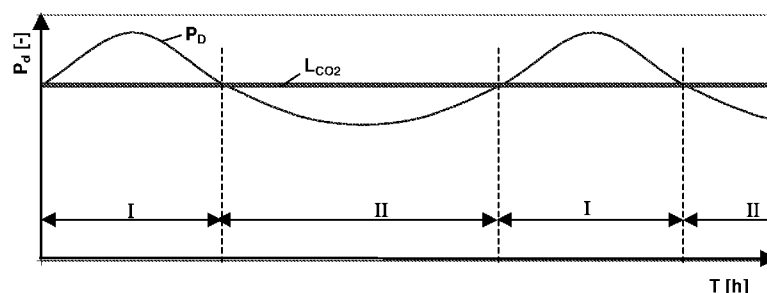
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8 March 2012(54) Title: POWER PLANT WITH CO₂ CAPTURE AND COMPRESSION

Fig. 1

(57) Abstract: Since CO₂ is identified as a main greenhouse gas, its capture and storage is essential to control of global warming. Flexible operation of CO₂ capture and compression equipment will increase the competitiveness of power plants (1) designed for CO₂ capture and compression and will allow earlier introduction of this kind of plants. The main objective of the present invention is to improve the plant operating characteristics by taking advantage of the additional flexibility, which can be realized by controlling the power consumption of the CO₂ capture and compression system. One particular aim is to minimize the impact of CO₂ capture and compression on the capacity of a power plant (1), i.e. to maximize the electric power the plant can deliver to the power grid. Further, the impact of CO₂ capture and compression on the average plant efficiency shall be reduced. Both are achieved by an operating method, in which the power consumption of the CO₂ capture system is used to control the net output (D) of the plant. Besides the method a power plant (1) designed to operate according to this method is subject of the present invention.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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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, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/131582 A1 (ANDERSON ROGER E [US] ET AL) 17 July 2003 (2003-07-17)	15-22
A	paragraph [0021] - paragraph [0043]; claims; figures abstract	1-14
X	US 6 196 000 B1 (FASSBENDER ALEXANDER G [US]) 6 March 2001 (2001-03-06)	15-22
A	column 3, line 28 - column 12, line 58; claims; figures; tables abstract	1-14
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INTERNATIONAL SEARCH REPORT

International application No
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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