

Title (en)
Combined gas and steam plant with fluidized bed.

Title (de)
Kombinations-Gas-Dampfturbinenanlage mit Wirbelschichtfeuerung.

Title (fr)
Cycle combiné gaz et vapeur avec lit fluidisé.

Publication
EP 0243801 A1 19871104 (DE)

Application
EP 87105588 A 19870415

Priority
DE 3613300 A 19860419

Abstract (en)
[origin: US4845942A] A combined gas turbine and steam power plant for generating electrical energy includes a combustion chamber for the complete combustion of solid fuels with the aid of a stationary fluidized bed generating steam for the operation of the steam power plant, the combustion chamber having a nozzle bottom, a fuel delivery point above the nozzle bottom, and a wall with at least one opening formed therein for the removal of combustible gas produced from a fuel degasification and gasification zone forming during operation in the fluidized bed in the vicinity of the fuel delivery point, a combustor of the gas turbine plant in which compressed air required for the operation of the gas turbine is heated by combustion of combustible gas, and a combustible gas line connected between the at least one opening and the combustor.

Abstract (de)
Bei einem Verfahren bzw. bei einer Anlage zur Erzeugung elektrischer Energie mit Hilfe einer kombinierten Gasturbinen-Dampfkraftanlage, die eine Wirbelschichtfeuerung (10) aufweist, wird die für den Betrieb der Gasturbinenanlage benötigte, verdichtete Luft in einer mit Brenngas befeuerten Brennkammer (32) erhitzt. Um die Versorgung der Brennkammer (32) mit Brenngas zu verbilligen und zu vereinfachen, wird das Brenngas durch Entgasung bzw. Entgasung von Wirbelschichtfeuerungs-Brennstoff innerhalb des Wirbelschichtfeuerungs-systems erzeugt.

IPC 1-7
F01K 23/06; **F02C 3/20**

IPC 8 full level
F02C 3/28 (2006.01); **F01K 23/06** (2006.01); **F02C 3/20** (2006.01); **F02C 6/18** (2006.01)

CPC (source: EP US)
F01K 23/061 (2013.01 - EP US)

Citation (search report)

- [X] FR 1585425 A 19700123
- [A] GB 2145347 A 19850327 - FOSTER WHEELER ENERGY CORP
- [AD] US 4387560 A 19830614 - HAMILTON STUART, et al
- [A] GB 1165537 A 19691001 - COAL INDUSTRY PATENTS LTD [GB]
- [A] EP 0161970 A1 19851121 - FRAMATOME & CIE [FR]
- [A] EP 0069243 A1 19830112 - KRAFTWERK UNION AG [DE]
- [A] DE 3338107 A1 19840530 - BBC BROWN BOVERI & CIE [CH]
- [A] US 3986348 A 19761019 - SWITZER JR GEORGE W
- [A] US 3978657 A 19760907 - FULTON GARLAND L, et al

Cited by
EP0329155A1

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EP 0243801 A1 19871104; **EP 0243801 B1 19891213**; AT E48673 T1 19891215; DE 3613300 A1 19871022; DE 3761156 D1 19900118; JP S62255535 A 19871107; US 4845942 A 19890711; US 4901521 A 19900220

DOCDB simple family (application)
EP 87105588 A 19870415; AT 87105588 T 19870415; DE 3613300 A 19860419; DE 3761156 T 19870415; JP 9293487 A 19870415; US 31693589 A 19890228; US 3761887 A 19870413