

Title (en)

AN ADVANCED TECHNOLOGY POLLUTION FREE, HIGHLY EFFICIENT INDUSTRIAL POWER GENERATION SYSTEM

Title (de)

UMWELTFREUNDLICHES HOCHTECHNOLOGIE KRAFTWERK MIT SEHR GROSSEM WIRKUNGSGRAD

Title (fr)

SYSTEME DE PRODUCTION INDUSTRIELLE D'ENERGIE A RENDEMENT ELEVE, NON POLLUANT ET DE TECHNOLOGIE DE POINTE

Publication

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Application

**EP 98955147 A 19981027**

Priority

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Abstract (en)

[origin: WO9922127A1] A low pollution gas generator includes a source of a mixture of oxygen rich gas and fuel, the oxygen rich gas having less nitrogen than air and more oxygen than air. The mixture is passed into a combustion chamber where it is ignited. The premixing of the oxygen and fuel prior to entering the combustion chamber allows for more efficient combustion. Water is used as a heat absorbing agent. The mainstream gases from the combustion chamber expand through a primary turbine and then are reheated before expanding through a secondary turbine. Heat from the mainstream gases is transferred to an auxiliary flow of water which becomes steam and is expanded through an auxiliary turbine. The system of the present invention may obtain efficiencies of 65 % or even higher. Furthermore, this system provides little or no pollution and is compact compared to industrial power generation systems of similar power output.

IPC 1-7

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