

Title (en)  
A PROCESS FOR GENERATING MECHANICAL POWER

Publication  
**EP 0086504 B1 19880309 (EN)**

Application  
**EP 83200018 A 19830105**

Priority  
NL 8200585 A 19820216

Abstract (en)  
[origin: EP0086504A2] Process for generating mechanical power by premixing a gaseous fuel with steam, burning the fuel/steam mixture and expanding the hot combustion gas in a turbine. Preferably the expanded gas is cooled to a temperature in the range of from 150 DEG C to 250 DEG C, and then used for heating water by indirect heat exchange to a temperature in the range of from 130 DEG C to 200 DEG C. The hot water may be evaporated into the gaseous fuel by contacting it therewith countercurrently. Steam is thus generated at a relatively low temperature by evaporating preheated water into the fuel gas stream to be burned in the combustion chamber of a gas turbine. In this way waste heat of a low temperature level can be put to good use.

IPC 1-7  
**F01K 21/04**; **F02C 3/30**

IPC 8 full level  
**F02C 3/30** (2006.01); **F01K 21/04** (2006.01); **F02C 6/18** (2006.01); **F02C 7/22** (2006.01)

CPC (source: EP)  
**F01K 21/047** (2013.01)

Cited by  
US5054279A; EP0318706A1; EP0588392A1; EP1211401A1; EP0238835A3; US4733528A; EP0207620A3; AU583385B2; EP0384781A1; AU630919B2; US6502402B1; WO9500747A1

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**EP 0086504 A2 19830824**; **EP 0086504 A3 19850306**; **EP 0086504 B1 19880309**; AU 1138383 A 19830825; AU 555824 B2 19861009; CA 1222382 A 19870602; DE 3375936 D1 19880414; JP H0475372 B2 19921130; JP S58150030 A 19830906; NL 191444 B 19950301; NL 191444 C 19950704; NL 8200585 A 19830916; ZA 83985 B 19840328

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**EP 83200018 A 19830105**; AU 1138383 A 19830214; CA 421501 A 19830214; DE 3375936 T 19830105; JP 2176983 A 19830214; NL 8200585 A 19820216; ZA 83985 A 19830214