

Title (en)
THERMAL POWER PROCESS

Title (de)
WÄRMEKRAFTPROZESS

Title (fr)
TRAITEMENT D'ENERGIE THERMIQUE

Publication
EP 1483483 B1 20061018 (DE)

Application
EP 03714950 A 20030311

Priority
• CH 4432002 A 20020314
• EP 0350053 W 20030311

Abstract (en)
[origin: WO03076769A1] In a power generating system, particularly a gas turbine group, a gaseous process fluid is conducted inside a closed circuit. The gaseous process fluid flows through a compression device (1), a heater (6) and an expansion means (2), particularly a turbine. The gaseous process fluid is cooled inside at least one heat sink (11, 13), which is situated downstream from the expansion means, before it is returned into the compression device (1). According to the invention, at least one heat sink is configured as a waste heat steam generator inside of which a superheated quantity of steam (26) is generated that is admixed to the compressed gaseous process fluid. The steam, together with the gaseous process fluid, optionally flows through the heater (6) and is expanded together with the same. The expanded steam condenses in the waste heat steam generator (11) and in another heat sink (13). The condensate is processed inside a filter (16) and, while under pressure, is fed once again to the waste heat steam generator (11) via a feed pump (18). The closed process conduction enables the process fluids and the process filling to be freely selected for controlling output.

IPC 8 full level
F01K 21/04 (2006.01)

CPC (source: EP US)
F01K 21/04 (2013.01 - EP US)

Cited by
CN105317484A; CN108279572A

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 03076769 A1 20030918; AT E343048 T1 20061115; AU 2003219156 A1 20030922; DE 50305418 D1 20061130; EP 1483483 A1 20041208; EP 1483483 B1 20061018; US 2005072154 A1 20050407; US 7069726 B2 20060704

DOCDB simple family (application)
EP 0350053 W 20030311; AT 03714950 T 20030311; AU 2003219156 A 20030311; DE 50305418 T 20030311; EP 03714950 A 20030311; US 93937504 A 20040914