

Title (en)

Generator-gas turbine-turbo compressor line and method for operating the same

Title (de)

Generator-Dampfturbine-Turboverdichter-Strang und Verfahren zum Betreiben desselben

Title (fr)

Tronçon de générateur-turbine à gaz-turbocompresseur et procédé destiné au fonctionnement de celui-ci

Publication

EP 2045441 A1 20090408 (DE)

Application

EP 07019475 A 20071004

Priority

EP 07019475 A 20071004

Abstract (en)

The line (1) has a turbo-compressor (4) driven by a generator (2) with a variable frequency, and a steam turbine (3), where the generator and steam turbine are coupled together to a shafting (5), and the turbine is driven with a steam control valve. The generator is electrically coupled to an electrical power supply system (6) for feeding power supply, and the steam turbine is connected to a live steam feeding device (7) for feeding live steam to the steam turbine such that the line has a rotational speed, which is controllable by varying the power supply feeding or live steam feeding. An independent claim is also included for a method for operating a generator-steam turbine-turbo-compressor-line.

Abstract (de)

Ein Generator-Dampfturbine-Turboverdichter-Strang weist einen frequenzvariablen Generator, eine Dampfturbine und einen von dem Generator und/oder der Dampfturbine antreibbaren Turboverdichter auf, die zu einem Wellenstrang zusammengekoppelt sind, wobei der Generator an ein elektrisches Netz zur Netzeinspeisung elektrisch koppelbar ist und die Dampfturbine an eine Frischdampfzufuhreinrichtung zum Zuführen von Frischdampf zu der Dampfturbine anschließbar ist, so dass der Generator-Dampfturbine-Turboverdichter-Strang über eine Variation der Netzeinspeisung und/oder über die Frischdampfzufuhr drehzahlregelbar ist.

IPC 8 full level

F01D 1/00 (2006.01); **F01D 15/08** (2006.01); **F01D 15/10** (2006.01); **F01D 19/00** (2006.01)

CPC (source: EP US)

F01D 1/00 (2013.01 - EP US); **F01D 15/08** (2013.01 - EP US); **F01D 15/10** (2013.01 - EP US); **F01D 19/00** (2013.01 - EP US); **F05D 2220/72** (2013.01 - EP US); **F05D 2260/4023** (2013.01 - EP US); **F05D 2260/85** (2013.01 - EP US); **F05D 2270/02** (2013.01 - EP US); **F05D 2270/061** (2013.01 - EP US)

Citation (applicant)

- JP S585407 A 19830112 - ISHIKAWAJIMA HARIMA HEAVY IND
- JP S6299602 A 19870509 - TOSHIBA CORP
- WO 2006084809 A1 20060817 - ALSTOM TECHNOLOGY LTD [CH], et al

Citation (search report)

- [XY] JP S585407 A 19830112 - ISHIKAWAJIMA HARIMA HEAVY IND
- [Y] JP S6299602 A 19870509 - TOSHIBA CORP
- [Y] WO 2006084809 A1 20060817 - ALSTOM TECHNOLOGY LTD [CH], et al

Cited by

EP3301267A1; CN102330573A; WO2018059864A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 2045441 A1 20090408; EP 2045441 B1 20100602; AT E470049 T1 20100615; BR PI0817803 A2 20160809; CN 101815845 A 20100825; DE 502007004025 D1 20100715; ES 2343336 T3 20100728; JP 2010540829 A 20101224; JP 4940352 B2 20120530; KR 101531831 B1 20150626; KR 20100065394 A 20100616; MX 2010003515 A 20100421; PL 2045441 T3 20101130; RU 2010117378 A 20111110; RU 2478795 C2 20130410; US 2010213709 A1 20100826; US 8575774 B2 20131105; WO 2009043875 A1 20090409

DOCDB simple family (application)

EP 07019475 A 20071004; AT 07019475 T 20071004; BR PI0817803 A 20081001; CN 200880109922 A 20081001; DE 502007004025 T 20071004; EP 2008063149 W 20081001; ES 07019475 T 20071004; JP 2010527443 A 20081001; KR 20107009661 A 20081001; MX 2010003515 A 20081001; PL 07019475 T 20071004; RU 2010117378 A 20081001; US 68097308 A 20081001