

Title (en)

POWER PLANT AND METHOD OF OPERATING A POWER PLANT

Title (de)

KRAFTWERK UND VERFAHREN ZUM BETRIEB EINES KRAFTWERKS

Title (fr)

CENTRALE ET PROCÉDÉ D'EXPLOITATION DE CELLE-CI

Publication

EP 2729669 A1 20140514 (EN)

Application

EP 11776527 A 20110707

Priority

IB 2011002321 W 20110707

Abstract (en)

[origin: WO2013005071A1] A fossil fuel fired power plant (PP) can provide an improved dynamic response by means of condensate stop and optionally with indirect firing. The power plant (PP) having a water steam cycle comprises six condensate preheaters (21 -26) arranged in series for the preheating by heat exchange with steam extracted from the steam turbines (7-10). Steam extraction lines (23'-26') have a quick-action valve (23"-26") able to stop the extraction steam flow, whereby the additional steam flowing through the turbines enables a large load increase up to 10% within a short time of 10 seconds. In case of a coal-fired power plant (PP), the power plant (PP) comprises a supply silo (45) for pulverized coal that enables a quick increase in supply rate of coal to the boiler (1) and of the firing rate. This allows the load increase to be maintained over a longer time period.

IPC 8 full level

F01K 7/40 (2006.01); **F01K 13/02** (2006.01); **F22D 1/00** (2006.01); **F22D 1/32** (2006.01)

CPC (source: EP)

F01K 7/40 (2013.01); **F01K 13/02** (2013.01); **F22D 1/003** (2013.01); **F22D 1/325** (2013.01)

Citation (search report)

See references of WO 2013005071A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2013005071 A1 20130110; CN 103635660 A 20140312; CN 103635660 B 20151125; EP 2729669 A1 20140514; KR 101563529 B1 20151027; KR 20140036016 A 20140324; MY 163336 A 20170915; ZA 201400202 B 20150429

DOCDB simple family (application)

IB 2011002321 W 20110707; CN 201180072153 A 20110707; EP 11776527 A 20110707; KR 20147003118 A 20110707; MY PI2013004638 A 20110707; ZA 201400202 A 20140109