

Title (en)

METHOD FOR OPERATING A STEAM GENERATOR

Title (de)

VERFAHREN ZUM BETRIEB EINES DAMPFERZEUGERS

Title (fr)

PROCÉDÉ DE FONCTIONNEMENT D'UN GÉNÉRATEUR DE VAPEUR

Publication

EP 2906876 B1 20161228 (DE)

Application

EP 13777007 A 20131010

Priority

- DE 102012019928 A 20121011
- EP 2013071139 W 20131010

Abstract (en)

[origin: WO2014057025A2] The invention relates to a method for operating a steam generator having a boiler (1) fired with brown coal, having at least one first mill for grinding the brown coal. The method comprises milling pit-moist raw brown coal (7) in the first mill, branching off a drying flue gas stream (9) from the boiler (1), drying the raw brown coal (7) in the first mill in direct contact with the drying flue gas stream (9), blowing a flue gas/brown coal stream from the first mill into the boiler, and drying a subquantity of raw brown coal in a separate drying unit to give dry brown coal (8), and feeding the dry brown coal (8) from the separate drying unit into a flue gas brown coal stream (10) upstream of a burner allocation, or into the burner allocation.

IPC 8 full level

F23K 1/04 (2006.01)

CPC (source: EP)

F23K 1/04 (2013.01); **F23K 2201/20** (2013.01); **F23K 2201/501** (2013.01); **F23K 2203/002** (2013.01); **F23K 2203/202** (2013.01); **F23K 2900/01041** (2013.01)

Citation (opposition)

Opponent : Mitsubishi Hitachi Power Systems Europe GmbH

- DE 4003499 A1 19900809 - STEINMUELLER GMBH L & C [DE]
- EP 0694148 A1 19960131 - VER ENERGIEWERKE AG [DE]
- DE 102012019928 A1 20140430 - RWE POWER AG [DE]
- WO 2014057025 A2 20140417 - RWE POWER AG [DE]
- DE 19623209 C1 19980226 - RHEINISCHE BRAUNKOHLLENW AG [DE]
- DE 3835427 A1 19900419 - SAARBERG INTERPLAN GMBH [DE], et al
- DE 3835428 A1 19900419 - SAARBERG INTERPLAN GMBH [DE], et al
- DE 102012108539 A1 20140313 - HITACHI POWER EUROPE GMBH [DE]
- DE 19643573 A1 19980416 - VER ENERGIEWERKE AG [DE]
- DE 102009035062 A1 20110210 - RWE POWER AG [DE]
- M F G CREMERS: "IEA Bioenergy Task 32, Deliverable 4, Technical status of biomass co-firing", KEMA, 11 August 2009 (2009-08-11), Arnhem, pages 1 - 43, XP055603279
- MICHALIS AGRANIOTIS ET AL.: "Numerical investigation of solid recovered fuels' co-firing with brown coal in large scale boilers -Evaluation of different co-combustion modes.", FUEL 89, vol. 89, 2010, pages 3693 - 3709, XP027284049
- "Power Point Presentation Dr. Christian Bergins, Aktuelle und zukünftige Herausforderungen in der Forschung und Entwicklung für die Kraftwerkstechnik", DEUTSCHER FLAMMENTAG, VERBRENNUNG UND FEUERUNG, 16 September 2009 (2009-09-16), XP055603291

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 2014057025 A2 20140417; **WO 2014057025 A3 20150122**; AU 2013328717 A1 20150507; AU 2018202163 A1 20180426; AU 2018202163 B2 20190919; CA 2887109 A1 20140417; CA 2887109 C 20200901; CN 104781606 A 20150715; CN 104781606 B 20170829; DE 102012019928 A1 20140430; EP 2906876 A2 20150819; EP 2906876 B1 20161228; EP 2906876 B2 20200101; PL 2906876 T3 20170630; PL 2906876 T5 20200713

DOCDB simple family (application)

EP 2013071139 W 20131010; AU 2013328717 A 20131010; AU 2018202163 A 20180327; CA 2887109 A 20131010; CN 201380058873 A 20131010; DE 102012019928 A 20121011; EP 13777007 A 20131010; PL 13777007 T 20131010