

Title (en)
Boiler equipped with a superheater

Title (de)
Mit einem Überhitzer ausgestatteter Kessel

Title (fr)
Chaudière équipée d'un surchauffeur

Publication
EP 2381169 A2 20111026 (EN)

Application
EP 11397508 A 20110421

Priority
FI 20105445 A 20100423

Abstract (en)
A boiler (1) comprising at least: a furnace (2), in whose lower part the combustion used as the primary source of thermal energy of the boiler is configured to take place; devices (6) for supplying fuel into the furnace; devices (3, 7, 8, 26) for supplying combustion air into the furnace; one or more flue gas ducts (11); at least one chamber (17) accommodating at least one steam superheater (15) for recovering thermal energy. Said chamber is configured to allow a direct line of sight (16) between said superheater and said primary source, to enable the reception of thermal energy by means of thermal radiation. Said chamber is further configured to prevent the entry of said flue gases (19) to said superheater either totally or almost totally, to avoid the reception of thermal energy by convection.

IPC 8 full level
F22B 31/00 (2006.01); **F22G 1/02** (2006.01); **F22G 1/06** (2006.01)

CPC (source: EP FI US)
D21C 11/12 (2013.01 - FI); **F22B 31/0007** (2013.01 - EP US); **F22G 1/02** (2013.01 - EP US); **F22G 1/06** (2013.01 - EP US);
F23L 7/00 (2013.01 - FI)

Citation (applicant)
• WO 2006134227 A1 20061221 - VALTION TEKNILLINEN [FI], et al
• WO 02059526 A1 20020801 - VATTENFALL AB [SE], et al
• EP 2071239 A2 20090617 - METSO POWER OY [FI]
• WO 9813649 A1 19980402 - FOSTER WHEELER ENERGIA OY [FI]
• WO 9602792 A2 19960201 - AALBORG IND AS [DK], et al
• WO 03104547 A1 20031218 - ANDRITZ OY [FI], et al

Cited by
EP3023166A1

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2381169 A2 20111026; BR PI1101749 A2 20120918; CA 2736951 A1 20111023; CN 102242922 A 20111116; FI 123021 B 20121015; FI 20105445 A0 20100423; FI 20105445 A 20111024; RU 2011116182 A 20121027; US 2011259284 A1 20111027

DOCDB simple family (application)
EP 11397508 A 20110421; BR PI1101749 A 20110418; CA 2736951 A 20110411; CN 201110107561 A 20110422; FI 20105445 A 20100423; RU 2011116182 A 20110422; US 201113091450 A 20110421