

Title (en)

COOLING SYSTEM FOR THE DRY EXTRACTION OF HEAVY ASHES FROM BOILERS

Title (de)

KÜHLSYSTEM FÜR DIE TROCKENEXTRAKTION VON SCHWEREN ASCHEN AUS KESSELN

Title (fr)

SYSTÈME DE REFROIDISSEMENT PERMETTANT L'EXTRACTION SÈCHE DES CENDRES LOURDES DE CHAUDIÈRES

Publication

**EP 2057415 A1 20090513 (EN)**

Application

**EP 06796268 A 20060822**

Priority

IT 2006000626 W 20060822

Abstract (en)

[origin: WO2008023394A1] The present invention relates to an additional cooling system (1) for the dry extraction of large flow of heavy ashes produced by boilers (100) with solid fuel apt to decrease the temperature of the ashes. The system comprises an extractor with metallic belt (2) gathering the ash which deposits onto the bottom of the boiler (100), a crushing system (3), having the purpose of increasing the thermal exchange surface of the material, one or more metallic conveyors (4, 6) having the cooling function by introducing countercurrent air - flow running through transported ashes, an in-line cooling device (5) having the function of putting into contact the ash several times with additional countercurrent air in order to increase the possible exchange without necessarily increasing the air - flow entering the combustion chamber. Such additional air can be sent preferably upstream of the air heater or in atmosphere upon fines' captation (figure 1).

IPC 8 full level

**F23J 1/02** (2006.01)

CPC (source: EP US)

**F23J 1/02** (2013.01 - EP US); **F23J 2700/001** (2013.01 - EP US); **F23J 2900/01002** (2013.01 - EP US); **F23J 2900/01003** (2013.01 - EP US)

Citation (search report)

See references of WO 2008023394A1

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 NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

**WO 2008023394 A1 20080228**; AU 2006347455 A1 20080228; BR PI0621955 A2 20111220; CA 2661623 A1 20080228; CN 101506579 A 20090812; EA 014862 B1 20110228; EA 200900335 A1 20090630; EP 2057415 A1 20090513; JP 2010501822 A 20100121; MX 2009001890 A 20090608; US 2010170425 A1 20100708

DOCDB simple family (application)

**IT 2006000626 W 20060822**; AU 2006347455 A 20060822; BR PI0621955 A 20060822; CA 2661623 A 20060822; CN 200680055652 A 20060822; EA 200900335 A 20060822; EP 06796268 A 20060822; JP 2009525176 A 20060822; MX 2009001890 A 20060822; US 43812509 A 20090910