

Title (en)
METHOD AND SYSTEM FOR MONITORING THE CONTENT OF IRON CONTAINING MATERIALS IN A PARTICULATE ASH STREAM OF A FLUIDIZED BED BOILER

Title (de)
VERFAHREN UND SYSTEM ZUR ÜBERWACHUNG DES GEHALTS AN EISENHALTIGEN MATERIALIEN IN EINEM PARTIKELFÖRMIGEN ASCHESTROM EINES WIRBELSCHICHTKESSELS

Title (fr)
PROCÉDÉ ET SYSTÈME POUR SURVEILLER LE CONTENU DE MATÉRIAUX CONTENANT DU FER DANS UN FLUX DE CENDRES PARTICULAIRES D'UNE CHAUDIÈRE À LIT FLUIDISÉ

Publication
EP 3951263 A1 20220209 (EN)

Application
EP 20189964 A 20200807

Priority
EP 20189964 A 20200807

Abstract (en)
Disclosed is a method for monitoring the content of iron containing materials in a particulate ash stream of a fluidized bed boiler, characterized by the steps of:a. measuring magnetic susceptibility of a particulate ash stream from an ash outlet of the boiler;b. magnetic separation of this ash stream into a magnetizable and non-magnetizable fraction;c. measuring magnetic susceptibility of the magnetizable fraction;d. calculating the weight specific magnetic susceptibility of the particulate ash stream and the magnetizable fraction;e. calculating the normalized magnetic susceptibility by dividing the weight specific magnetic susceptibility of the particulate ash stream through the weight specific magnetic susceptibility of the magnetizable fraction;f. using this normalized magnetic susceptibility as an indicator of the content of iron containing materials in the ash stream.

IPC 8 full level
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CPC (source: EP)
B03C 1/22 (2013.01); **B03C 1/30** (2013.01); **F23C 10/26** (2013.01); **F23J 1/02** (2013.01); **B03C 2201/20** (2013.01); **B03C 2201/24** (2013.01); **F23J 2700/001** (2013.01); **F23J 2900/01001** (2013.01); **F23J 2900/15023** (2013.01)

Citation (applicant)
H. THUNMAN ET AL., FUEL, vol. 113, 2013, pages 300 - 309

Citation (search report)
• [A] CN 109402404 A 20190301 - UNIV BEIJING SCIENCE & TECH
• [A] US 2019330720 A1 20191031 - ALBRECHT EDWARD W [US], et al
• [A] US 2019256949 A1 20190822 - ALBRECHT EDWARD W [US], et al

Designated contracting state (EPC)
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