

Title (en)  
METHOD FOR VERIFYING THE FILLING LEVEL OF COAL IN A BALL MILL

Title (de)  
VERFAHREN ZUR REGELUNG DES KOHLEFÜLLUNGSGRADES EINER KUGELMÜHLE

Title (fr)  
PROCEDE POUR CONTROLER LE NIVEAU DE REMPLISSAGE EN CHARBON D'UN BROYEUR A BOULET

Publication  
**EP 1173280 B1 20031008 (FR)**

Application  
**EP 00917148 A 20000407**

Priority  
• FR 0000880 W 20000407  
• FR 9904737 A 19990415

Abstract (en)  
[origin: FR2792224A1] Method involves drum rotationally mounted on two distant bearings, and series of bondage-gage weight sensors (11 to 16) placed under bearings. Sensors send electric signals representing weight of drum with load. Signals are sent to calculation unit (19) producing electric signal (P). Before being compared with data base (20) pre-established in comparator (21) with exit linked to conventional regulator (22) regulating coal feeder (23) to mill, weight measured by first weight value (FV) representing vertical component of effort created by rotational driving torque of drum is corrected. Exit signal from comparator regulates working speed of feeder, hence regulates coal (24) flow of mill. An Independent claim is also included for the apparatus to verify filling level of coal.

IPC 1-7  
**B02C 17/18**; **B02C 25/00**

IPC 8 full level  
**G01G 3/14** (2006.01); **B02C 17/04** (2006.01); **B02C 17/18** (2006.01); **B02C 25/00** (2006.01); **G01G 19/52** (2006.01)

CPC (source: EP US)  
**B02C 17/1805** (2013.01 - EP US); **B02C 25/00** (2013.01 - EP US)

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**US 6619574 B1 20030916**; AT E251497 T1 20031015; AU 3825600 A 20001102; AU 754114 B2 20021107; CA 2365299 A1 20001026; CN 1207101 C 20050622; CN 1348398 A 20020508; CZ 20013710 A3 20020213; DE 60005811 D1 20031113; DE 60005811 T2 20040805; EP 1173280 A1 20020123; EP 1173280 B1 20031008; ES 2208296 T3 20040616; FR 2792224 A1 20001020; FR 2792224 B1 20010601; JP 2002542018 A 20021210; PL 195355 B1 20070928; PL 351555 A1 20030505; WO 0062935 A1 20001026; ZA 200107821 B 20021121

DOCDB simple family (application)  
**US 95848402 A 20020109**; AT 00917148 T 20000407; AU 3825600 A 20000407; CA 2365299 A 20000407; CN 00806235 A 20000407; CZ 20013710 A 20000407; DE 60005811 T 20000407; EP 00917148 A 20000407; ES 00917148 T 20000407; FR 0000880 W 20000407; FR 9904737 A 19990415; JP 2000612065 A 20000407; PL 35155500 A 20000407; ZA 200107821 A 20010921