

Title (en)  
Monitoring device for ball mills

Title (de)  
Ueberwachungsvorrichtung für Kugelmühlen

Title (fr)  
Dispositif de surveillance d'un broyeur à boulets

Publication  
**EP 0745427 B1 20000510 (FR)**

Application  
**EP 96401133 A 19960524**

Priority  
FR 9506523 A 19950601

Abstract (en)  
[origin: EP0745427A1] The grinder has a cylindrical casing containing a number of balls which, when the grinder is rotating at its nominal speed, takes up a position between two generatrices spaced by an angle between a minimal angle  $\alpha_{\min}$  and a maximal angle  $\alpha_{\max}$ . An amount of coal is also included which, when the grinder is rotating at its nominal speed, takes up a position between two generatrices spaced by an angle  $\beta$ . An electromagnetic wave emitter is disposed inside the grinder and at least one wave receiver is disposed outside the grinder. The receiver is associated with an electronic circuit for determining at least one parameter of the grinder selected from the quantity of balls, the quantity of coal and the wear of the cylinder.

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

IPC 8 full level  
**B02C 17/18** (2006.01); **B02C 25/00** (2006.01)

CPC (source: EP US)  
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Cited by  
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**EP 0745427 A1 19961204**; **EP 0745427 B1 20000510**; AT E192670 T1 20000515; CA 2177932 A1 19961202; CN 1142988 A 19970219; DE 69608163 D1 20000615; DE 69608163 T2 20001221; DK 0745427 T3 20001002; ES 2147905 T3 20001001; FR 2734739 A1 19961206; FR 2734739 B1 19970711; US 5698797 A 19971216; ZA 957979 B 19960418

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