

Title (en)

Device and method for monitoring the movement of a grinding ball in a ring ball mill

Title (de)

Vorrichtung und Verfahren zur Überwachung der Mahlkugelbewegung in einer Kugelringmühle

Title (fr)

Dispositif et procédé destinés à la surveillance du mouvement d'une balle de broyage dans un broyeur à bague de roulement à billes

Publication

**EP 2075072 B1 20101208 (DE)**

Application

**EP 07025134 A 20071227**

Priority

EP 07025134 A 20071227

Abstract (en)

[origin: EP2075072A1] The ball ring mill (99) has a grinder (1) with multiple grinding balls (4), which are guided in a mill track between a grinding ring (2) and a pressure ring (3). The grinding balls are movable along the mill track due to difference of rotational speeds of the grinding and pressure rings. A sensor system (11) is provided for contactless detection of the movement of the grinding balls, where the sensor system has expansion-measuring strips, a radiation source e.g. microwave source and light source, and a radiation detector e.g. microwave detector and light detector. The sensor system is inductive, capacitive, magnetic, optical, acoustic and electromagnetic proximity switches. An independent claim is also included for a method for monitoring a movement of a grinding ball in a ball ring mill.

IPC 8 full level

**B02C 15/12** (2006.01); **B02C 25/00** (2006.01)

CPC (source: EP)

**B02C 15/123** (2013.01); **B02C 25/00** (2013.01)

Cited by

CN109174344A; EP3159061A1; CN107127022A; CN114289137A; EP3885033A4

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