Title (en)

METHOD FOR DETECTING WEAR IN CRUSHERS DURING IDLE OPERATION

Title (de)

VERFAHREN ZUR VERSCHLEISSERKENNUNG BEI BRECHERN IN LEERFAHRT

Title (fr)

PROCÉDÉ DE DÉTECTION D'USURE DANS DES CONCASSEURS EN MARCHE À VIDE

Publication

EP 4149684 A1 20230322 (DE)

Application

EP 21726035 A 20210510

Priority

- AT 504182020 A 20200513
- AT 2021060163 W 20210510

Abstract (en)

[origin: WO2021226647A1] A method for detecting wear in crushers, having a wearing part (2) mounted on a drive shaft (1), during idle operation is described. In order to create a method of the type discussed in the introduction such that downtimes that impair crusher productivity can be eliminated and nevertheless reliable wear detection is made possible with low risk of injury to machine operators, it is proposed that the drive shaft (1) is accelerated from a starting angular speed (ω1) to an end angular speed (ω2) with a specified acceleration and the drive energy required for this is ascertained, whereupon the wear of the wearing part (2) is ascertained as the value assigned to the required drive energy in a specified wearing-part characteristic curve (3, 4, 5).

IPC 8 full level

B02C 13/09 (2006.01)

CPC (source: AT EP US)

B02C 13/02 (2013.01 - US); **B02C 13/04** (2013.01 - US); **B02C 13/09** (2013.01 - EP US); **B02C 13/095** (2013.01 - EP); **B02C 13/26** (2013.01 - AT); **B02C 25/00** (2013.01 - US); **G06T 7/0004** (2013.01 - US); **G06T 7/50** (2017.01 - US); **G06T 7/62** (2017.01 - US); B02C 2210/01 (2013.01 - EP US); G06T 2207/10028 (2013.01 - US); G06T 2207/20081 (2013.01 - US); G06T 2207/20084 (2013.01 - US); G06T 2207/30128 (2013.01 - US); G06T 2207/30164 (2013.01 - US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

WO 2021226647 A1 20211118; AT 523805 A1 20211115; AT 523805 B1 20220915; CN 115175766 A 20221011; CN 115175766 B 20240618; EP 4149684 A1 20230322; US 2023082463 A1 20230316

DOCDB simple family (application)

AT 2021060163 W 20210510; AT 504182020 A 20200513; CN 202180008163 A 20210510; EP 21726035 A 20210510; US 202117799998 A 20210510