

Title (en)

APPARATUS FOR COMMINUTING ORE, COMPRISING A HYDRAULIC SPRING DEVICE, AND ASSOCIATED METHOD

Title (de)

VORRICHTUNG ZUM ERZZERKLEINERN UMFASSEND EINE HYDRAULISCHE FEDEREINRICHTUNG UND ENTSPRECHENDES VERFAHREN

Title (fr)

DISPOSITIF DE CONCASSAGE DE MINERAI COMPORTANT UN DISPOSITIF RESSORT HYDRAULIQUE ET PROCÉDÉ CORRESPONDANT

Publication

EP 3204162 A1 20170816 (DE)

Application

EP 15775713 A 20151008

Priority

- DE 102014014945 A 20141009
- EP 2015073235 W 20151008

Abstract (en)

[origin: CA2963764A1] The invention relates to a device (290) for comminuting ore and/or slag, comprising an ore feeding unit (1) for feeding ore which is to be comminuted to a first pulverizer (300), said first pulverizer (300) being composed of at least of two comminuting elements (30, 40) which can be moved relative to each other, said elements forming together at least one comminuting space for the ore which is to be comminuted, such that, by a relative movement in the form of a rotation about the rotational axis of at least one of the two comminuting elements (30, 40), the ore which is to be comminuted is at least partially pulverized. One or more accelerating elements (35), in particular protrusions (35), are provided on at least one of the comminuting elements (30, 40), said accelerating elements being arranged in particular on the end face of at least one of the two comminuting elements (30, 40) and accelerating and comminuting the ore to be comminuted by the rotation of one of the two comminuting elements (30, 40). An intermediate space (60) is provided between the two comminuting elements (30, 40) and/or in at least one of the two comminuting elements (30, 40), through which space the pulverized ore, during the rotation, is transported from the center of rotation toward the outside and away from the two comminuting elements (30, 40). At least one of the two comminuting elements (30, 40) is operatively connected to a hydraulic spring pressure device (604), said hydraulic spring pressure device (604) being designed such that the comminuting element (30, 40) to which it is operatively connected is variably resiliently mounted in the direction of the other comminuting element (30, 40) depending on an adjustable hydraulic spring pressure control unit.

IPC 8 full level

B02C 7/06 (2006.01); **B02C 7/14** (2006.01); **B02C 19/00** (2006.01); **B02C 23/12** (2006.01)

CPC (source: EP US)

B02C 7/06 (2013.01 - EP US); **B02C 7/12** (2013.01 - US); **B02C 7/14** (2013.01 - EP US); **B02C 7/16** (2013.01 - US); **B02C 19/0012** (2013.01 - EP US); **B02C 19/005** (2013.01 - US); **B02C 23/12** (2013.01 - EP US)

Citation (search report)

See references of WO 2016055558A1

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

DOCDB simple family (publication)

DE 102014014945 A1 20160414; AU 2015330024 A1 20170525; CA 2963764 A1 20160414; CL 2017000849 A1 20171006; EP 3204162 A1 20170816; US 2017312752 A1 20171102; WO 2016055558 A1 20160414; ZA 201701917 B 20180530

DOCDB simple family (application)

DE 102014014945 A 20141009; AU 2015330024 A 20151008; CA 2963764 A 20151008; CL 2017000849 A 20170407; EP 15775713 A 20151008; EP 2015073235 W 20151008; US 201515517828 A 20151008; ZA 201701917 A 20170317