

Title (en)

DEVICE FOR STRESSING PARTICLES BY MEANS OF ELECTRIC PULSES

Title (de)

EINRICHTUNG ZUR BEANSPRUCHUNG VON PARTIKELN MITTELS ELEKTROIMPULSEN

Title (fr)

SYSTÈME D'APPLICATION D'UNE CONTRAINTE SUR DES PARTICULES AU MOYEN D'IMPULSIONS ÉLECTRIQUES

Publication

EP 3894080 A1 20211020 (DE)

Application

EP 19820710 A 20191210

Priority

- DE 102018131541 A 20181210
- EP 2019084332 W 20191210

Abstract (en)

[origin: WO2020120437A1] The invention relates to devices for stressing particles (9) by means of electric pulses (11) using an apparatus for supplying particles, at least one vertically arranged piece of piping (2) with a reaction space for stressing particles, and an apparatus for discharging particles. The devices are distinguished, in particular, in that they are already present in a manner better or completely separated into relatively coarse fractions for the purpose of subsequent comminution. To this end, the piece of piping (2) and therefore the reaction space is a flow duct of a flowable medium (10). Furthermore, a device (4) which conveys the medium is connected to the pipe section such that the medium flows counter to the direction of movement of particles which are fed to the piece of piping and drop through the piece of piping (2). The pipe section has at least two electrodes (5) which are arranged at a distance from one another and are connected to at least one pulse voltage generator in the form of a Marx generator (6). Furthermore, the electrodes end with or in front of the inner surface of the piece of piping , so that the electrodes (5) do not protrude into the piece of piping(2) and do not impede the flow of the medium in the piece of piping.

IPC 8 full level

B02C 19/18 (2006.01)

CPC (source: EP)

B02C 19/18 (2013.01); **B02C 2019/183** (2013.01)

Citation (search report)

See references of WO 2020120437A1

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 102018131541 A1 20200610; AU 2019398306 A1 20210701; CN 113301998 A 20210824; CN 113301998 B 20240130;
EA 202191520 A1 20210826; EP 3894080 A1 20211020; WO 2020120437 A1 20200618

DOCDB simple family (application)

DE 102018131541 A 20181210; AU 2019398306 A 20191210; CN 201980081980 A 20191210; EA 202191520 A 20191210;
EP 19820710 A 20191210; EP 2019084332 W 20191210