

Title (en)  
DEVICE AND METHOD FOR VIBRATION-OPTIMISED COUPLING OF A MILLING CHAMBER TO AN ECCENTRIC SHAFT OF A DISC-TYPE VIBRATORY MILL AND A USE

Title (de)  
VORRICHTUNG UND VERFAHREN ZUM SCHWINGUNGSTECHNISCH OPTIMIERTEN KOPPELN EINER MAHLKAMMER AN EXZENTERWELLEN EINER SCHWINGSCHLEIBENMÜHLE SOWIE VERWENDUNG

Title (fr)  
DISPOSITIF POUR COUPLER UNE CHAMBRE DE BROYAGE À UNE ARBRE EXCENTRIQUE DE LA MANIÈRE VIBRATION-OPTIMISÉE DANS UN BROYEUR VIBRANT À DISQUE ET UTILISATION

Publication  
**EP 3969182 B1 20230621 (DE)**

Application  
**EP 20726794 A 20200515**

Priority  
• DE 102019207222 A 20190517  
• EP 2020063714 W 20200515

Abstract (en)  
[origin: WO2020234191A1] The invention relates to a vibrating disc milling device (10) for comminuting feed material, comprising: a milling housing (11); a milling system (13) which is arranged in the milling housing in an oscillating manner and which comprises a milling chamber (13.1) and at least one millstone movably arranged in the milling chamber; at least one eccentric shaft drive (14), which is mounted in the milling housing and generates the oscillating movement in the milling chamber, and at least two eccentric shafts (15); and at least one compensating mass unit (16) which is coupled to the eccentric shaft drive and is designed to compensate for an imbalance; wherein the compensating mass unit is coupled to the eccentric shaft drive such that a phase offset of more than 180°, in particular more than 185°, can be set between the eccentric maximum of the compensating mass unit and the eccentric maximum of the milling chamber, thus allowing vibrationally optimized operating conditions. The invention additionally relates to a method for vibrationally regulating a vibrating disc milling device and to the use of eccentric shafts (15) with a phase offset.

IPC 8 full level  
**B02C 17/14** (2006.01); **B02C 17/24** (2006.01)

CPC (source: EP)  
**B02C 17/14** (2013.01); **B02C 17/24** (2013.01)

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

DOCDB simple family (publication)  
**DE 102019207222 A1 20201119**; EP 3969182 A1 20220323; EP 3969182 B1 20230621; EP 3969182 C0 20230621;  
WO 2020234191 A1 20201126

DOCDB simple family (application)  
**DE 102019207222 A 20190517**; EP 2020063714 W 20200515; EP 20726794 A 20200515