

Title (en)  
SYSTEM AND METHOD FOR AN ELECTRODYNAMIC FRAGMENTATION

Title (de)  
ANLAGE UND VERFAHREN ZUR ELEKTRODYNAMISCHEN FRAGMENTIERUNG

Title (fr)  
INSTALLATION ET PROCÉDÉ DE FRAGMENTATION ÉLECTRODYNAMIQUE

Publication  
**EP 3787796 A1 20210310 (DE)**

Application  
**EP 19720548 A 20190426**

Priority  
• DE 102018003512 A 20180428  
• EP 2019060740 W 20190426

Abstract (en)  
[origin: WO2019207108A1] The invention relates to a fragmentation system (1) for an electrodynamic fragmentation of material (5), comprising a feed (3) and an outlet (4) for transporting material along a transport path (8) in a transport direction (9), comprising at least one high-voltage pulse source (11), wherein each of the high-voltage pulse sources (11) has at least one first electrode (10a) and at least one second electrode (10b) for generating a high-voltage discharge (19) in a discharge chamber, and the transport path (8) has a fractionation section (18), said fractionation section (18) running through the discharge chamber. The fragmentation system also comprises a selection means for a selective discharge of the material (5) on the transport path in order to extract material (5) and/or fragments of the material with a diameter which is smaller than a minimum diameter at at least one part of one of the fractionation sections (18). In a method for an electrodynamic fragmentation of material (5), material (5) is transported from an inlet (3) to an outlet (4) along a transport path (9). The transport path (8) has a fractionation section (18), at least one high-voltage pulse source (11) has at least one first electrode (10a) and at least one second electrode (10b), and the high-voltage pulse source (11) generate a high-voltage discharge in a discharge chamber, said discharge chamber being arranged between the first electrode (10a) and the second electrode (10b). Material (5) and/or fragments of the material with a diameter which is smaller than a minimum diameter is extracted at at least one part of one of the fractionation sections (18).

IPC 8 full level  
**B02C 19/18** (2006.01); **B02C 23/10** (2006.01); **B02C 23/14** (2006.01); **B02C 23/38** (2006.01)

CPC (source: EP KR US)  
**B02C 19/18** (2013.01 - EP KR US); **B02C 23/10** (2013.01 - EP KR US); **B02C 23/14** (2013.01 - EP KR US); **B02C 23/38** (2013.01 - EP KR US); **B02C 2019/183** (2013.01 - EP KR 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

DOCDB simple family (publication)  
**WO 2019207108 A1 20191031**; AU 2019260555 A1 20201112; AU 2019260555 B2 20240523; CA 3098305 A1 20191031; CN 112313010 A 20210202; CN 112313010 B 20240416; DE 102018003512 A1 20191031; EP 3787796 A1 20210310; JP 2021522069 A 20210830; JP 7321253 B2 20230804; KR 102615222 B1 20231215; KR 20210002560 A 20210108; SG 11202010174R A 20201127; US 11857978 B2 20240102; US 2021069724 A1 20210311

DOCDB simple family (application)  
**EP 2019060740 W 20190426**; AU 2019260555 A 20190426; CA 3098305 A 20190426; CN 201980042140 A 20190426; DE 102018003512 A 20180428; EP 19720548 A 20190426; JP 2021508076 A 20190426; KR 20207033191 A 20190426; SG 11202010174R A 20190426; US 202017082313 A 20201028