Title (en)

METHOD AND DEVICE FOR FRAGMENTING AND/OR WEAKENING POURABLE MATERIAL BY MEANS OF HIGH-VOLTAGE DISCHARGES

Title (de)

VERFAHREN UND VORRICHTUNG ZUR FRAGMENTIERUNG UND/ODER SCHWÄCHUNG VON SCHÜTTFÄHIGEM MATERIAL MITTELS HOCHSPANNUNGSENTLADUNGEN

Title (fr)

PROCÉDÉ ET DISPOSITIF DE FRAGMENTATION ET/OU D'AFFAIBLISSEMENT D'UN MATÉRIAU COULANT AU MOYEN DE DÉCHARGES À HAUTE TENSION

Publication

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Application

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Abstract (en)

[origin: WO2016134492A1] The invention relates to a method for fragmenting pourable material (1) by means of high-voltage discharges. A material flow of the material (1) is guided past an electrode assembly (2) by means of a conveying device (6) that carries the material flow, the material flow being immersed in a process liquid (5), while high-voltage punctures through the material (1) of the material flow are produced by applying high-voltage pulses to the electrode assembly (2). The electrodes (12, 13) of the electrode assembly (2) are dipped into the process liquid (5) from above, and those of these electrodes (12, 13) between which the high-voltage punctures are produced lie opposite each other transversely to the material guiding-past direction (S) at an electrode distance in each case. The invention makes enables the provision of a continuous method for fragmenting large amounts of pourable material (1), wherein the dwell time of the material (1) in the process zone can be set in wide ranges and practically independently of the piece size of the materials and wherein complex conveying devices that are electrically conductive at least in the region of the process zone, which are expensive and additionally subject to heavy wear, can be forgone.

IPC 8 full level

B02C 19/18 (2006.01)

CPC (source: EP US)

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