

Title (en)
PROCESS AND DEVICE FOR TREATING GASBORNE PARTICLES

Title (de)
VERFAHREN UND VORRICHTUNG ZUR BEHANDLUNG GASGETRAGENER PARTIKEL

Title (fr)
PROCEDE ET DISPOSITIF PERMETTANT DE TRAITER DES PARTICULES TRANSPORTEES PAR GAZ

Publication
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Application
EP 95906297 A 19950104

Priority
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Abstract (en)
[origin: US5824137A] An apparatus (10) to carry out a process, in particular for the electrically induced agglomeration of gas-borne particles, contains a closed flow duct (12) through which is directed an aerosol containing particles (14). For the purpose of the bipolar charging of the aerosol, at least one electrode pair (20, 22) is arranged in the flow duct (12), the electrode (20) being wired, so as to be ungrounded, to the negative pole of a current source, the strength of which is sufficient to produce a corona discharge between the electrodes (20 and 22). The electrodes (20 and 22) of each electrode pair are designed to be needle-shaped and are arranged to be insulated with respect to the flow duct walls, such that their tips (26) are disposed opposite each other. By use of the apparatus (10), it is possible to charge the aerosol which is directed through the flow duct (12) at least virtually symmetrically bipolarly, without any substantial particle deposition in the region of the electrodes (20) and (22) or in the flow duct (12).

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