

Title (en)  
ELECTROSTATIC AIR CLEANING DEVICE

Title (de)  
ELEKTROSTATISCHE LUFTREINIGUNGSVORRICHTUNG

Title (fr)  
NETTOYEUR D'AIR ELECTROSTATIQUE

Publication  
**EP 1885502 A4 20101215 (EN)**

Application  
**EP 05744060 A 20050429**

Priority  
US 2005014934 W 20050429

Abstract (en)  
[origin: WO2006135353A1] An electrostatic air cleaning device includes an array (201) of electrodes. The electrodes include corona electrodes (102) connected to a suitable source (100) of high voltage so as to generate a corona discharge. Laterally displaced collecting electrodes (203) include one or more bulges (207) that have aerodynamic frontal upwind surfaces and airflow disrupting trailing edges downwind that create quiet zones (209) for the collection of particulates removed from the air. The bulges (207) may be formed as rounded leading edges on the collecting electrodes (203) and/or ramped surfaces (415) located, for example, along a midsection of the electrodes. Repelling electrodes (104) positioned between pairs of the collecting electrodes (203) may include similar bulges (517) such as cylindrical or semi-cylindrical leading and/or trailing edges (517).

IPC 8 full level  
**B03C 3/47** (2006.01)

CPC (source: EP)  
**B03C 3/08** (2013.01); **B03C 3/366** (2013.01); **B03C 3/47** (2013.01)

Citation (search report)

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- [X] JP H07124496 A 19950516 - HITACHI LTD
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Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA HR LV MK YU

DOCDB simple family (publication)  
**WO 2006135353 A1 20061221**; AU 2005333037 A1 20061221; CA 2611186 A1 20061221; CN 101213025 A 20080702; EA 012251 B1 20090828; EA 200702391 A1 20080428; EP 1885502 A1 20080213; EP 1885502 A4 20101215; JP 2008539067 A 20081113; MX 2007013382 A 20080118

DOCDB simple family (application)  
**US 2005014934 W 20050429**; AU 2005333037 A 20050429; CA 2611186 A 20050429; CN 200580050293 A 20050429; EA 200702391 A 20050429; EP 05744060 A 20050429; JP 2008508813 A 20050429; MX 2007013382 A 20050429