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(54) Title (EN): ELECTROSTATIC PRECIPITATOR UNIT FOR AIR PURIFIER AND AIR PURIFIER EMPLOYING SAME

(54) Title (FR): UNITÉ DE PRÉCIPITATEUR ÉLECTROSTATIQUE POUR PURIFICATEUR D'AIR ET PURIFICATEUR D'AIR UTILISANT CELLE-CI

(54) Title (KO): 공기정화기용 전기집진유닛과 이를 이용한 공기정화기

(57) Abstract:

(EN): Disclosed are an electrostatic precipitator unit for an air purifier and an air purifier employing the same. An electrostatic precipitator unit for an air purifier according to an embodiment of the present invention comprises: a first main polar plate supplied with a high voltage; a plurality of first polar plates arranged in parallel with each other, one end portion of each first polar plate being connected to the first main polar plate; a second main polar plate which is grounded, and which is arranged in parallel with the first main polar plate at a location spaced apart from the other end portion of the first polar plate; a plurality of second polar plates arranged between the plurality of first polar plates, respectively, one end portion of each second polar plate being connected to the second main polar plate; a plurality of first blocking members arranged on the other end portions of the first polar plates, respectively, and made of an insulating material so as to insulate between the other end portions of the first polar plates and the second polar plates; and a plurality of second blocking members arranged on the other end portions of the second polar plates, respectively, and made of an insulating material so as to insulate between the other end portions of the second polar plates and the first polar plates.

(FR): La présente invention concerne une unité de précipitateur électrostatique pour un purificateur d'air et un purificateur d'air utilisant celle-ci. Une unité de précipitateur électrostatique pour un purificateur d'air selon un mode de réalisation de la présente invention comprend : une première plaque polaire principale alimentée par une haute tension ; une pluralité de premières plaques polaires agencées en parallèle l'une avec l'autre, une partie d'extrémité de chaque première plaque polaire étant reliée à la première plaque polaire principale ; une deuxième plaque polaire principale qui est mise à la terre, et qui est agencée en parallèle avec la première plaque polaire principale à un emplacement espacé de l'autre partie d'extrémité de la première plaque polaire ; une pluralité de deuxièmes plaques polaires agencées entre la pluralité de premières plaques polaires, respectivement, une partie

d'extrémité de chaque deuxième plaque polaire étant raccordée à la deuxième plaque polaire principale ; une pluralité de premiers éléments de blocage agencés sur les autres parties d'extrémité des premières plaques polaires, respectivement, et constituées d'un matériau isolant de façon à isoler entre les autres parties d'extrémité des premières plaques polaires et des deuxièmes plaques polaires ; et une pluralité de deuxièmes éléments de blocage agencés sur les autres parties d'extrémité des deuxièmes plaques polaires, respectivement, et constitués d'un matériau isolant de façon à isoler entre les autres parties d'extrémité des deuxièmes plaques polaires et des premières plaques polaires.

(KO): 공기정화기용 전기집진유닛과 이를 이용한 공기정화기가 개시되며, 본 발명의 일 실시예에 따른 공기정화기용 전기집진유닛은 고전압을 공급받는 제1 메인극판, 복수 개로 구비되고, 각각의 일단부가 상기 제1 메인극판에 연결되며 서로 평행하게 배치되는 제1 극판, 상기 제1 극판의 타단부로부터 이격된 위치에서 상기 제1 메인극판에 평행하게 배치되며, 접지되는 제2 메인극판, 복수 개로 구비되고, 각각의 일단부가 상기 제2 메인극판에 연결되며 상기 복수 개의 제1 극판 사이마다 배치되는 제2 극판, 복수 개로 구비되어 상기 제1 극판 각각의 타단부에 배치되며, 절연 재질로 이루어져 상기 제1 극판의 타단부와 상기 제2 극판 사이를 절연하는 제1 차단부재 및 복수 개로 구비되어 상기 제2 극판 각각의 타단부에 배치되며, 절연 재질로 이루어져 상기 제2 극판의 타단부와 상기 제1 극판 사이를 절연하는 제2 차단부재를 포함한다.

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