

Title (en)

NOVEL DEVICE FOR PURIFYING AIR BY MEANS OF PLASMA

Title (de)

NEUARTIGE VORRICHTUNG ZUR REINIGUNG VON LUFT MITTELS PLASMA

Title (fr)

NOUVEAU DISPOSITIF D'EPURATION D'AIR PAR PLASMA

Publication

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Application

EP 19794994 A 20191025

Priority

- FR 1871306 A 20181025
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Abstract (en)

[origin: WO2020084138A1] A device for purifying air by means of plasma comprising: i) a least one electrical power source; ii) at least one ionizer (10) connected to the power source; iii) at least one filter (40) downstream of the ionizer; iv) at least one catalyzer (50) downstream of the ionizer (10) and of the at least one filter (40) downstream of the ionizer (10), which catalyzer (50) decomposes ozone; and v) at least one means for pressurizing air (1) so as to ensure that air flows from the ionizer (10) to the catalyzer (50); wherein the ionizer (10) takes the form of at least one corona-discharge plasma cell (11) comprising a) a substantially needle-shaped biased electrode (12) and b) a ground electrode (13), arranged facing the biased electrode (12), which comprises a cylinder (14) that is substantially centered on the biased electrode (12) and a substantially planar porous film (15) perpendicular to the biased electrode (12), wherein the cylinder (14) exhibits a low profile, and wherein the biased electrode (12) does not penetrate into the cylinder (14), the value of the diameter of the cylinder (14) corresponding to at least twice the value of its height.

IPC 8 full level

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CPC (source: EP)

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See references of WO 2020084138A1

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