

Title (en)

METHOD FOR TREATING AIR FROM A CONFINED SPACE IN A BUBBLE COLUMN

Title (de)

VERFAHREN ZUR BEHANDLUNG VON LUFT AUS EINEM GESCHLOSSENEN RAUM IN EINER BLASENSÄULE

Title (fr)

PROCEDE DE TRAITEMENT D'AIR D'UN ESPACE CONFINE DANS UNE COLONNE A BULLES

Publication

EP 4263025 A1 20231025 (FR)

Application

EP 21820637 A 20211209

Priority

- FR 2013654 A 20201218
- EP 2021084888 W 20211209

Abstract (en)

[origin: WO2022128712A1] The present invention relates to the use of a bubble column for the treatment of air contained in and/or entering and/or leaving a confined space in order to deplete said air of polluting gaseous compounds, especially NOx, SOx and/or VOC, and solid particles. The bubble column (100) comprises an enclosure, preferably cylindrical, with a ratio H/D # 1.5 (H: height, D: diameter), filled with liquid capable of capturing said particles and polluting gaseous compounds. The air is injected into the liquid at the bottom of the enclosure (1) so as to form bubbles, and at a flow rate such that the operating gas surface velocity U_g is 0.35 to 0.50 m/s. The air in the form of bubbles is thus treated by contact with the liquid such that at least a portion of the particles and/or the at least one polluting gaseous compound is collected by the liquid, and the treated air is discharged at the top of the enclosure.

IPC 8 full level

B01D 47/02 (2006.01); **B01D 53/00** (2006.01)

CPC (source: EP KR)

B01D 21/0087 (2013.01 - EP); **B01D 47/021** (2013.01 - EP KR); **B01D 53/1418** (2013.01 - KR); **B01D 53/1425** (2013.01 - KR);
B01D 53/1456 (2013.01 - EP KR); **B01D 53/1487** (2013.01 - EP KR); **B01D 53/18** (2013.01 - EP KR); **B01D 53/78** (2013.01 - KR);
B01D 2221/16 (2013.01 - EP KR); **B01D 2247/04** (2013.01 - EP KR); **B01D 2252/103** (2013.01 - EP KR); **B01D 2257/302** (2013.01 - EP KR);
B01D 2257/404 (2013.01 - EP KR); **B01D 2257/708** (2013.01 - EP KR); **B01D 2258/06** (2013.01 - EP KR)

Citation (search report)

See references of WO 2022128712A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

WO 2022128712 A1 20220623; EP 4263025 A1 20231025; FR 3117885 A1 20220624; FR 3117885 B1 20230512; JP 2023554246 A 20231227;
KR 20230123487 A 20230823

DOCDB simple family (application)

EP 2021084888 W 20211209; EP 21820637 A 20211209; FR 2013654 A 20201218; JP 2023532612 A 20211209; KR 20237023607 A 20211209