

Title (en)
ACOUSTIC TUBE ASPIRATOR APPARATUS

Title (de)
SCHALLSCHLAUCHASPIRATORVORRICHTUNG

Title (fr)
APPAREIL D'ASPIRATION À TUBE ACOUSTIQUE

Publication
EP 3477208 A1 20190501 (EN)

Application
EP 17199195 A 20171030

Priority
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Abstract (en)
The present invention refers to an acoustic tube aspirator apparatus for ventilating cooking environment comprises, at least one cylindrical tube (1), at least two sound transducers, at least one control unit and a plurality of amplifiers. Each of the sound transducers are attached to two ends of the cylindrical tube (1) for generating sound waves (6) inside the cylindrical tube (1) from both the ends of the cylindrical tube (1). The generated sound waves (6) from both the ends are in opposite direction to each other for creating standing wave inside the cylindrical tube (1). The cylindrical tube (1) is provided with plurality of holes (2, 3) for allowing air flow between the cylindrical tube (1) and the cooking environment. The holes are provided in the cylindrical tube (1) on locations of nodes (8) and antinodes (7) of the standing wave that pass through the cylindrical tube (1). The standing waves create precise pressure variations in specific volumes of the cylindrical tube (1) which in turn sucks unwanted gases and scattered fluids from the cooking environment thereby to create air flow in desired directions.

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CPC (source: EP)
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Citation (applicant)
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