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(54) **SOUNDPROOFING ACCESSORY**

(57) Soundproofing accessory, comprising a multi-material covering that is able to wrap around at least one extractor fan, fitted at the ends with airtight seals, consisting of several layers, consisting of an outer layer of resistant material, another of sound-absorbing fabric that prevents sound from escaping outside, and an

acoustic panel that absorbs and dissipates sound. At the ends, there is at least one seal that can be adapted to the contour of the outlet or inlet duct of the extractor, allowing an airtight seal and preventing the diffusion of noise from the extractor through the ends.

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Description

PURPOSE OF THE INVENTION

[0001] This invention, as its name suggests, is a soundproofing accessory which consists of a flexible soundproofing cover with airtight seals that can cover any noise-producing device. It can adapt to the inlet and outlet pipes of an air extractor, for example, absorbing noise pollution produced inside and, thus, preventing discomfort for users. This is an innovation that, in today's technological context, offers unprecedented advantages.

TECHNOLOGY SECTOR

[0002] This invention belongs to the ventilation machinery sector.

[0003] This invention consists of a soundproofing accessory in the form of a covering for extractors which decreases their noise pollution.

FACTUAL BACKGROUND OF THE INVENTION

[0004] In regard to current technology, it should be noted that in the wide range available on the market, there are extractors of different measurements, sizes and power, and their use generates a lot of noise, posing a very serious noise pollution problem. Although technical solutions are available, such as more efficient motors that reduce noise pollution, they are not completely exempt from this problem, and, to the knowledge of the applicant, there is no other method in existence that presents structural and constitutive technical characteristics equal or similar to those presented by the invention proposed here.

EXPLANATION OF THE INVENTION

[0005] The purpose of this invention is a soundproofing accessory, which consists of a multi-material covering that wraps around the extractor, and is fitted at each end with airtight seals that cinch closed.

[0006] The multi-material coating consists of several layers, an outer layer of resistant material, another of sound-absorbing fabric that prevents sound from escaping outside, and an acoustic panel that absorbs and dissipates sound.

[0007] At each end there are seals that can be adapted to the contour of the outlet or inlet duct of the extractor, allowing an airtight seal and preventing the diffusion of noise from the extractor through each end.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] In order to complete this description and to help better understand the characteristics of the invention, this descriptive statement is integrally accompanied by illus-

trative figures in which the following has been represented:

Figure 1 is a perspective depiction of the soundproofing accessory.

Figure 2 is a cutaway image of the soundproofing accessory showing the arrangement of the coating layers in detail (1).

PREFERRED COMPOSITION OF THE INVENTION

[0009] With the figures as a reference point, a preferred, but not limited, composition of the proposed invention, which consists of a soundproofing accessory, is described below. As shown in the figures, the soundproofing accessory has a cover (1), designed to wrap around an extractor (2) and its inlet and outlet (3) tubes, the cover (1) is placed on each side of the tubes (3) and is composed of several layers of materials bonded together, the outer layer (4), which is the one giving the soundproofing accessory its appearance, is made of a material resistant to inclement weather and wraps around the outside

of the other layers. A sound-absorbing layer (5), made of a sound-absorbing material that sound does not penetrate. An acoustic absorbing layer (6) made of an acoustic absorbing material designed to absorb sound and dissipate it. Inside there is an inner layer (7) that wraps around the other layers.

[0010] At its ends where it closes and affixes to the pipes (3), the soundproofing accessory has airtight seals that can be cinched closed (8) designed to fully seal off the edges of the cover (1). These ends are also finished with an edge (9), made of flexible material that adapts to the shape of the pipes (3).

Claims

1. Soundproofing accessory **characterised by** a cover (1), designed to wrap around an extractor (2) and its inlet and outlet (3) pipes, where the edges of the cover (1) are affixed to said pipes (3). It is composed of several layers of materials bonded together, an outer layer (4), made of a material resistant to inclement weather that covers the outside of the other layers; a sound-absorbing layer (5), made of a sound-absorbing material, that sound does not pass through; an acoustic absorbing layer (6), made of an acoustic absorbing material, designed to absorb sound and dissipate it, and on the inside, an inner layer (7) that covers the other layers on the inside.
2. Soundproofing accessory according to claim 1, **characterised by** the fact that the edges of the cover (1), where it seals and holds onto the pipes (3), have cinches (8) made to perform an airtight sealing of

the edges of the cover (1).

3. Soundproofing accessory according to claim 1, **characterised by** the fact that the ends of the cover (1), are finished with (9), a flexible material that adapts to the shape of the pipes (3).

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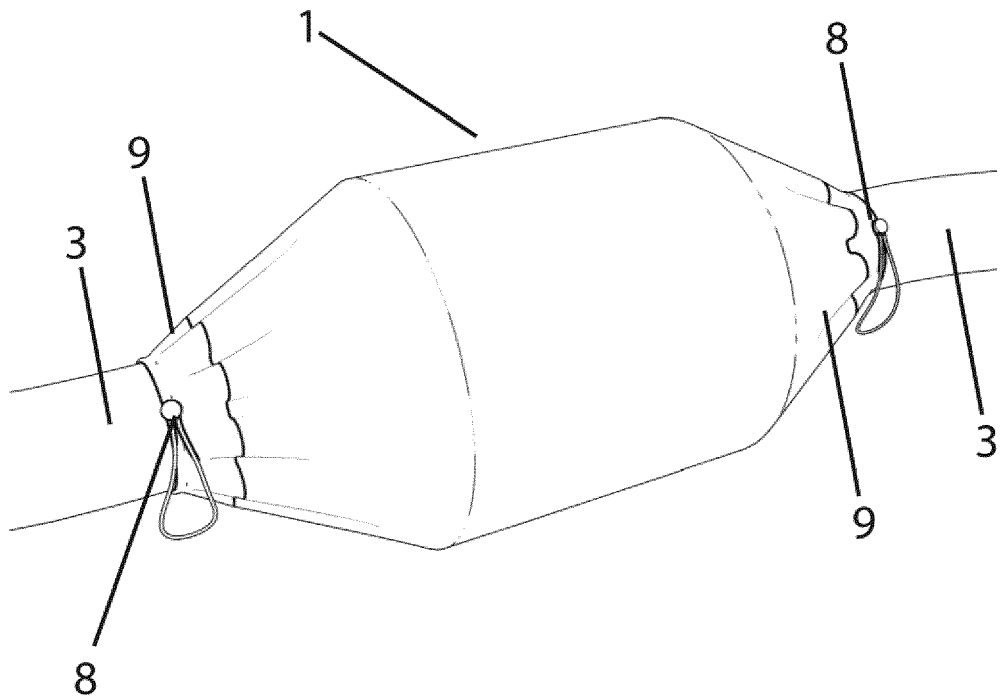


FIG. 1

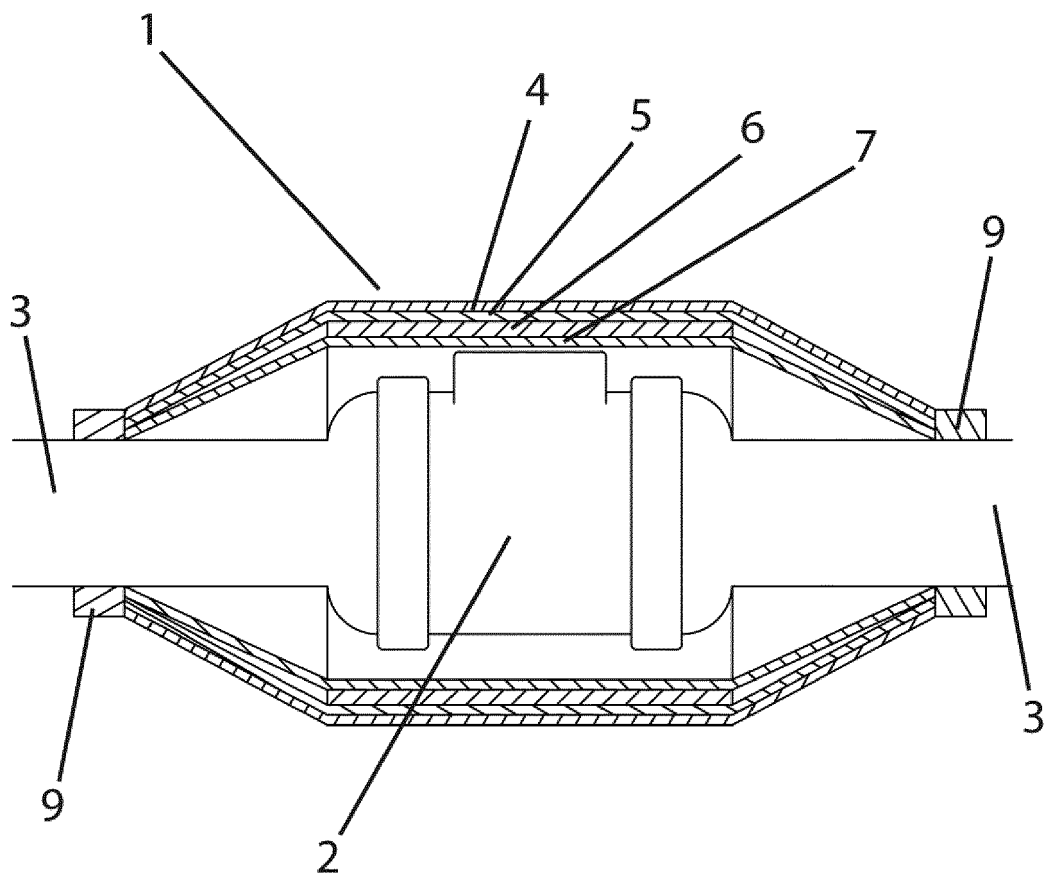


FIG.2



EUROPEAN SEARCH REPORT

Application Number

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DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 6 202 702 B1 (OHIRA YASUYUKI [JP] ET AL) 20 March 2001 (2001-03-20) * figures 1, 2 * * column 4, lines 19-26 * * column 4, lines 50-56 * * column 4, lines 64-67 * * column 5, lines 1-6 * -----	1-3	INV. G10K11/16 G10K11/168
X	Pyrothek Noise Control ET AL: "Lagging 251A", Technical data sheet, 1 July 2011 (2011-07-01), pages 1-2, XP055981207, Retrieved from the Internet: URL:https://www.eboss.co.nz/assets/literature/67/25935/lagging+IP+251A.pdf [retrieved on 2022-11-14] * page 1 - page 2 * -----	1-3	TECHNICAL FIELDS SEARCHED (IPC) G10K
The present search report has been drawn up for all claims			

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EPO FORM 1503 03:82 (P04C01)

Place of search	Date of completion of the search	Examiner
The Hague	14 November 2022	Naujoks, Marco
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document		

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

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5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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14-11-2022

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6202702 B1	20-03-2001	CA 2294679 A1 US 6202702 B1	06-07-2001 20-03-2001
