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(71) Applicant: **Méndez Hermant, Jonathan**
09003 Burgos (ES)

(72) Inventor: **Méndez Hermant, Jonathan**
09003 Burgos (ES)

(74) Representative: **ABG Intellectual Property Law,
S.L.**
Avenida de Burgos, 16D
Edificio Euromor
28036 Madrid (ES)

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(54) **MASK WITH COMPARTMENTS**

(57) The present invention is a compartmentalized facemask for prolonged wearing that provides advantages over currently marketed facemasks.

The compartmentalized facemask for prolonged

wearing allows the air inside the facemask to be compartmentalized, dividing the air from the nose and the air from the mouth to improve various aspects of prolonged use of this accessory.

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Description

OBJECT OF THE INVENTION

[0001] The invention, as the title of the present descriptive memory establishes, a compartmentalized facemask for prolonged wearing is an innovation which, within the state of the art, provides advantages over the currently marketed facemasks.

[0002] The compartmentalized facemask for prolonged wearing, allows the air inside the facemask to be compartmentalized, separating the air from the nose and the air from the mouth, to improve various aspects of prolonged use of the facemask.

[0003] This invention is particularly motivated by the COVID-19 pandemic and the use of facemasks. The invention allows the separation of air from the nose and mouth with several benefits over the existing state of the art: separating the air already breathed from the air to be breathed, reducing the sensation of suffocation during nasal and mixed breathing, and decreasing the accumulation of exhaled condensed air in lenses and other accessories.

TECHNICAL FIELD

[0004] The present invention has its field of application within the sector of protective facemasks, within the group of protective clothing and its accessories.

TECHNICAL STATE OF THE ART

[0005] The use of facemasks is widespread throughout the population, following the spread of COVID-19, and using it to protect against viruses.

[0006] Current facemasks lack a dividing element to compartmentalise them and divide the air from inhalation from the nose and exhalation from the mouth.

[0007] At the present time, there is no known long-exposure facemask with the same or similar structural and constitutive technical characteristics to those described here, as claimed.

DESCRIPTION OF THE INVENTION

[0008] The object of the present invention is the creation of a compartmentalized facemask for long exposure that provides a notable innovation within its field of application in the current technical state of the art, with the characteristic details that make this possible being included in the final claims that accompany the present description.

[0009] The compartmentalized facemask for long exposure consists of a facemask, a divider transverse to the facemask, arranged to divide the internal part of the facemask, the part in touch with the face, into two compartments. The divider, which will generally be made of a waterproof and breathable material, conforms to the

contour of the wearer's face; the facemask is adjusted to the contour of the wearer's face and head by means of an elastic adjustment element passing over the back of the wearer's head or behind the ears or by the use of a deformable plastic element of metallic material, polymer or combination thereof, with shape memory.

[0010] The divider, generally waterproof and breathable, allows effective separation of inhaled and exhaled air by mouth and nose in mixed breathing, offering advantages in nasal breathing. This is why the compartmentalized facemask is a remarkable innovation compared to current state of the art.

EXPLANATION OF THE FIGURES

[0011] To complete the description and in order to assist in the better understanding of the characteristics of the invention, the present descriptive report is accompanied, as an integral part of the same, by figures in which, for illustrative and non-limiting purposes, the following has been represented.

Figure 1 corresponds to a perspective view of the compartmentalized facemask, where the adjustment element is of the elastic type.

Figure 2, corresponds to a perspective view of the compartmentalized facemask, wherein the fitting element is of the shape-memory deformable plastic type.

Figure 3, corresponds to a view of the compartmentalized facemask, where the adjustment element is of the elastic type, being worn by a user.

PREFERRED IMPLEMENTATION OF THE INVENTION.

[0012] The object of the present invention is a compartmentalized facemask for prolonged wearing, which provides a notable innovation within its field of application, with the characteristic details that make it possible being conveniently included in the claims.

[0013] The compartmentalized facemask for prolonged wearing consists of a facemask (1), a divider (2) transversal to the facemask (1), in such a way that it divides the inside of the facemask (1) into two compartments.

[0014] The divider (2) adjusts to the contour of the user's face, thanks to an adjustment element (3) that has an elastic-type contour, wrapping around this adjustment element (3) and passing over the back of the user's head or behind the ears.

[0015] The divider (2) enables and separates the appropriate space for mouth air and nose air.

[0016] In one particular embodiment, the divider (2) is made of a waterproof and breathable material.

[0017] In one particular embodiment, the divider (2) is

sewn to the facemask (1).

[0018] In one particular embodiment, the divider (2) is attached to the facemask (1) by chemical or mechanical adhesive means, e.g. Velcro.

[0019] In one particular embodiment, the divider (2) is adapted to the contour of the wearer's face by means of a semi-rigid, shape-memory deformable material, such as a metal wire or plastic.

[0020] In one particular embodiment, the adjustment element (3) is not exclusive to the divider (2) and forms part of the facemask (1) itself, exerting its tension and adjustment effect on both elements: the facemask (1) and the divider (2).

Claims

1. Compartmentalized facemask for prolonged wearing, formed by a facemask (1), a divider (2) transversal to the facemask (1), in such a way that it divides in compartments the inside of the facemask (1), the divider (2) is adjusted to the contour of the user's face, thanks to an adjustment element (3) made of elastic or plastic with shape memory material located in its contour.
2. Compartmentalized facemask for prolonged wearing, according to claim 1, **characterized in that** the divider (2) is made of a waterproof and breathable material.
3. Compartmentalized facemask for prolonged wearing, according to claim 1, **characterized in that** the divider (2) is sewn to the facemask (1).
4. Compartmentalized facemask for prolonged wearing, according to claim 1, **characterized in that** the divider (2) is attached to the facemask (1) by means of chemical or mechanical adhesive.

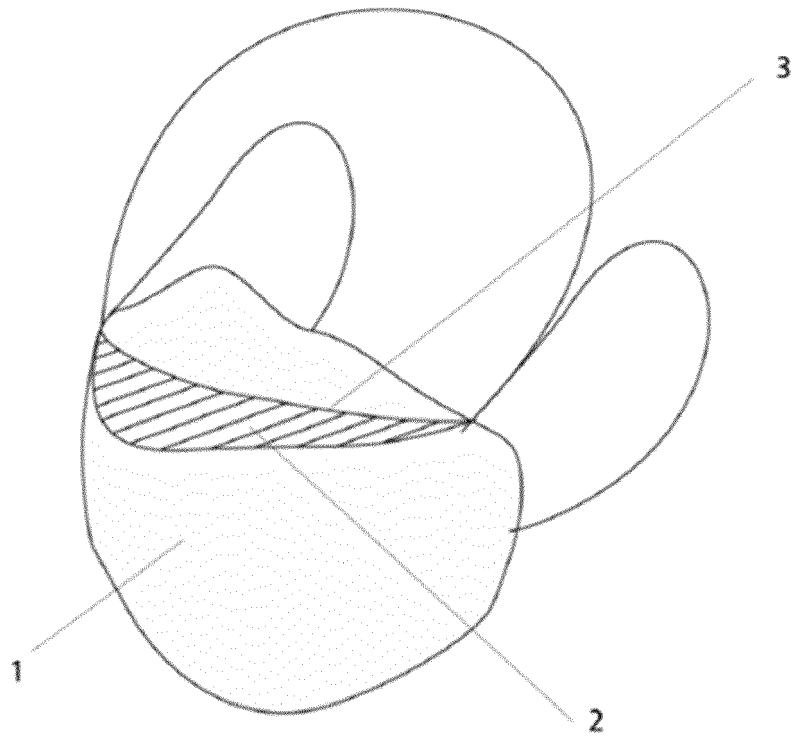


Figure 1.

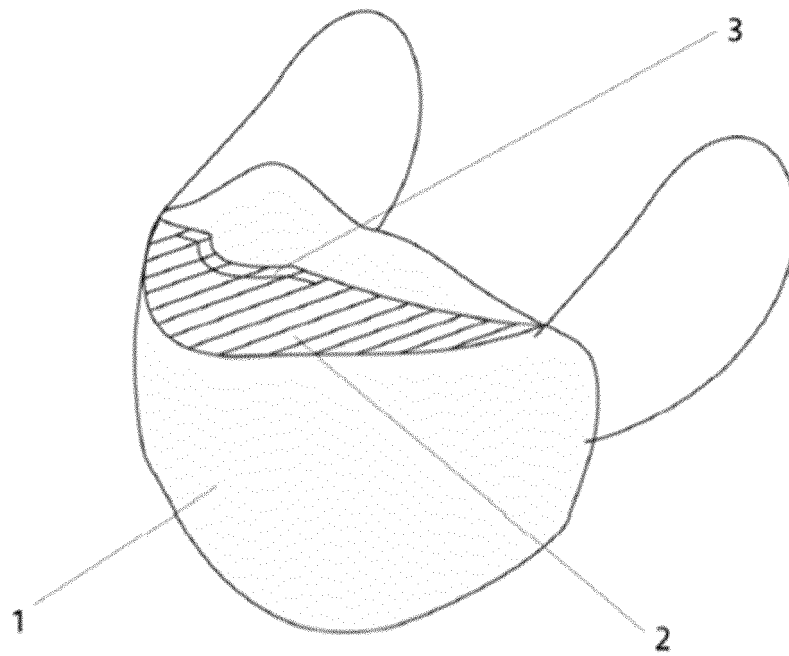


Figure 2.

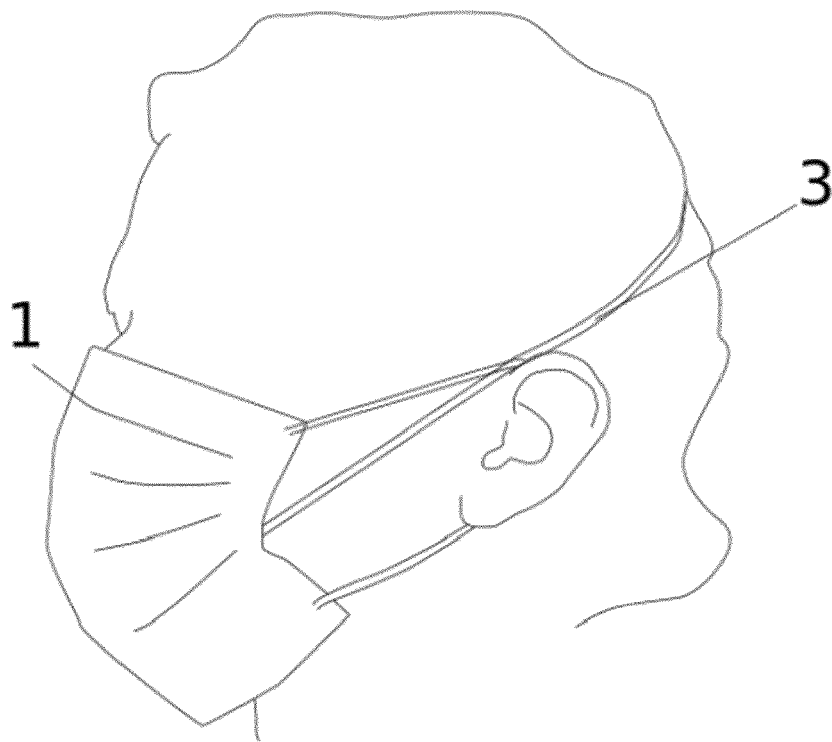


Figure 3.



EUROPEAN SEARCH REPORT

Application Number

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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 22 December 2021	Examiner Almeida, Mariana
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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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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