

Covid19 door sock handle cover

Patent No: AU2021100886

Publication date: 2021-04-22

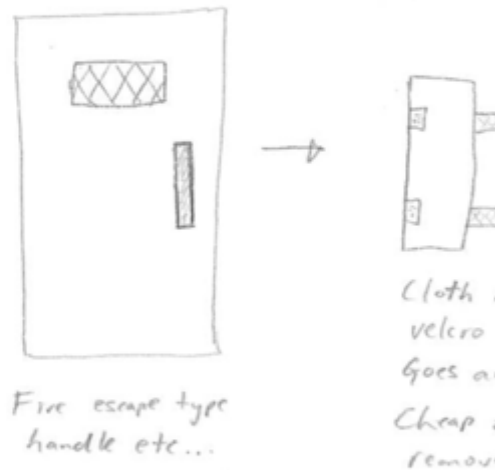
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Inventor(s): THEODORATOS KYRIACOS

Abstract

A sock cover for door handles to prevent the spread of COVID 19. The outside of the cover is to be a cloth like material and the inside of the cover has some rubberised texture to allow the gripping and turning of doorknobs. The cover also is designed to have some elastic around the perimeter to allow the cover to stay in place and not slip off the door handle/knob too readily.

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K. Theo

Portable mask with mini-ventilation process

Patent No: AU2020103839

Publication date: 2021-02-11

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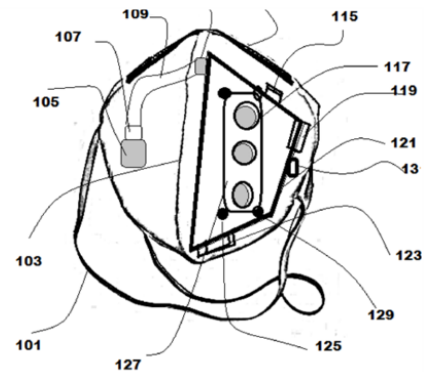


Fig. No.2

Abstract

Portable Mask with Mini Ventilation Process In the present pandemic situation, the ventilation process is not available while the infection is spreading with large number of communities as well. Whether to avail the ventilation at non-Govt. Hospital are very expensive by comparison with Govt. Hospital but here the number of treatment facility is too low while the common people are suffering for the pandemic as well. In this embodiment there is a Mask with mini ventilation process which will provide the ventilation and also it is portable and attached outside of the mask, in the present invention a mask with six layer protection and its outer side a small ventilation machine is fixed with the same , a lithium battery is fixed into the ventilation machine where a Basic Battery management system (BMS) is present to manage & charge the battery, prevent overcharging and over discharging problem ,also will maintain the long life of the machine, a charging point is situated outside of the ventilation machine which is fixed with mask, a 12 volte DC air pump used to deliver the air into the mask where the user will be more comfortable and also can avoid the warm , sweat, and can avail the fresh feeling, to prevent the breathing problem a inhaler is used into the machine and it can be push by the user from outside, a lather non air licking system is designed to push the inhaler from the outside , a pipe is deliver the air from the machine and the oxygen from inhaler into the mask inner side. One switch is present to on and off the operation of the ventilation machine. In this invention the mask designed with six layers protection also the ventilation machine will take the air by five-layer protection where the linen fabric is not present to the ventilation machine outer body. Where the first layer is fabric, the second layer is activated carbon, the third layer is fabric, the fourth layer is activated carbon, the fifth layer is fabric and sixth or last layer is linen fabric for comfort and softness.

Artificial intelligence based smart baggage disinfecting system in public transportation

Patent No: AU2021100903

Publication date: 2021-05-06

Applicant(s): R D

Inventor(s): PADMAJA S, PANDEY VIKAS

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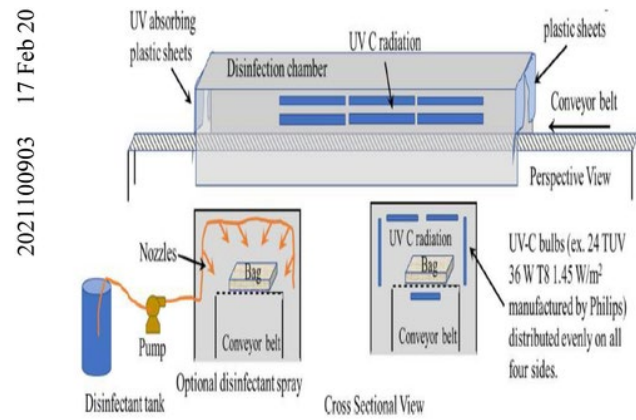


Figure 1. Proposed System of AI Based Baggage Disinfecting System in Public Transportation

Abstract

ARTIFICIAL INTELLIGENCE BASED SMART BAGGAGE DISINFECTING SYSTEM IN PUBLIC TRANSPORTATION In this pandemic era, many researchers are focused towards different aspects of mitigating COVID spread as it can be through diseased person or any other object in contact with the diseased person. Pandemic spread is expected to be large due to passengers and their baggage moving from infected region to non-infected region through public transportation. This invention proposes a novel method to mitigate the disease spread through packages or luggage at airports, bus stands or railway stations. A tunnel system is designed through which passenger luggage will be passed for fomites disinfection. This system involves eight T8 TUV bulbs of 36Watt each for illuminating the conveyer belt of one square meter for about 10 seconds. The conveyer belt is shielded at both entry and exit point with thin acrylic curtain to avoid any leakage of UV-C light. Additionally, a non-foaming biodegradable soap solution is sprayed for second round of disinfection without the usage of toxic solution of sodium hypochlorite. This spraying system is optional as UV rays totally disinfect the corona virus over the fomite surfaces mitigating its spread. UVabsorbing labslc h g Cradiation plasticshe Disinfectionchamber perspectiveView C n UV-Cbulbs(ex.24TUV H36W T81.415Wm² manufactured by Philips) le t Conveyor belt distributedevenlyonall optionaldisinfectantspraysides Disinfectant taki Cross Sectional View

Seat-deployed, virus body-shield

Patent No: US10966542

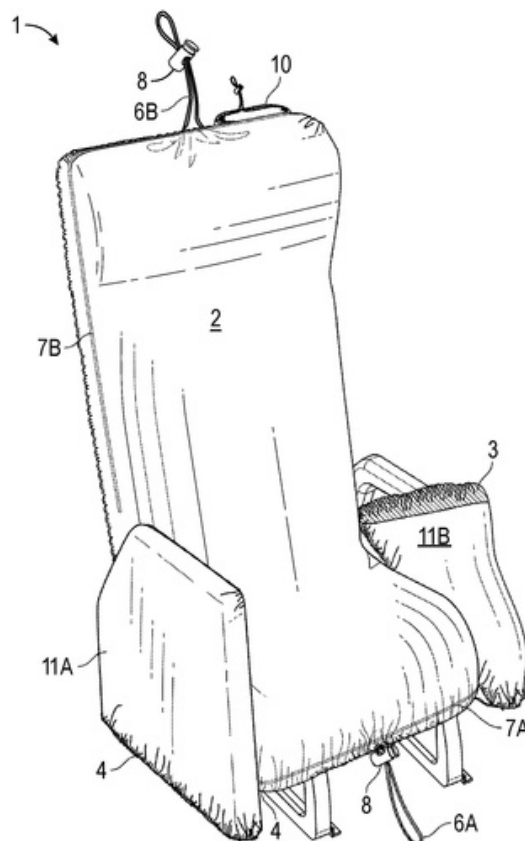
Publication date: 2021-04-06

Applicant(s): Guermagard

Inventor(s): LAUER-LISTHAUS BARBARA

Abstract

An elastic virus-repellent, body-shield formed from a virus-repellent fabric for isolating people from surfaces of public seating. The body-shield is deployed through fitting and securing the shield to a public seat through the elastic nature of the shield and anchoring drawstrings until retrieved and packed into an attached carrying pouch. Certain embodiments include analogous supplementary shields for armrests, fold-down tables, leg-supplements, headrests, and other surfaces from which users need to be shielded.



Moisture-permeable waterproof fabric

Patent No: WO2021/132657

Publication date: 2021-07-01

Applicant(s): TORAY INDUSTRY

Inventor(s): YAMADA, Kohei, OKUMURA, Kaori, NAKAYA, Yohei, UEDA, Takehiro

Abstract

Provided is a moisture-permeable waterproof fabric capable of reducing the environmental load thereof by being carbon neutral and having a prolonged product lifespan, and which has excellent water repellence and moisture permeability. The moisture-permeable waterproof fabric of the present invention has a porous moisture-permeable waterproof film on at least one surface of the fabric. The polyurethane, from which the moisture-permeable waterproof film is formed, is synthesized by using a polyol containing a polycarbonate diol having a plant-derived component.

(表1)

		比較例1	比較例2	実施例1	実施例2	実施例3	実施例4	実施例5
透湿防水膜の組成と性質	ポリオール成分(1)	セバシン酸系	C6ポリカ	C10ジオール: C4ジオール=5.5	C10ジオール: C4ジオール=3.7	C10ジオール: C4ジオール=1.9	C10ジオール: C4ジオール=1.9	C10ジオール: C4ジオール=1.9
	ポリオール成分(2)	-	PTMG	-	-	-	PTMG	-
	ジイソシアネート成分	MDI	MDI	MDI	MDI	MDI	MDI	MDI
	糖長剤成分	EG	EG	EG	EG	EG	EG	1,3-PG
	植物由来比	46%	0%	53%	53%	13%	9%	21%
	ウレタン溶液安定性	OK	OK	NG	NG	OK	OK	OK
透湿防水布帛の特性	耐水圧(kPa)	108	109	129	111	125	237	183
	透湿度(g/m ² hr)	435	440	358	439	432	448	432
	耐水圧 (ジャンブル10回後)	10%以下	84%	79%	80%	78%	79%	72%
	耐水圧 (ジャンブル20回後)	10%以下	80%	74%	77%	77%	75%	69%
	風合い	○	○	×	×	○	○	○

Natural, regenerated, sustainable fabric and method

Patent No: US20210017679

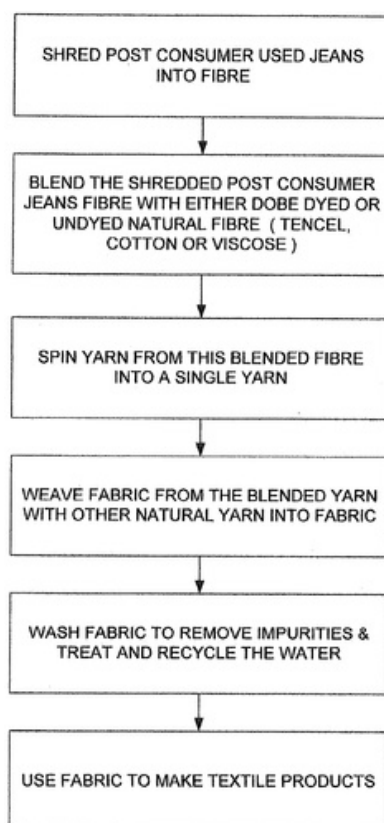
Publication date: 2021-01-21

Applicant(s): PODDAR MAHENDRA

Inventor(s): PODDAR MAHENDRA

Abstract

A natural, regenerated, sustainable fabric is fabricated of a primary yarn and a secondary yarn. The primary yarn is twisted from shredded recycled jeans and natural fibres. The secondary yarn includes natural fibres. The primary and secondary yarns are woven to constitute a warp yarn and a weft yarn of the fabric. The method of producing the fabric includes the steps of shredding post-consumer used jeans into fibre, blending the shredded post-consumer jeans fibre with either dobe-dyed or undyed natural fibre, the fibre selected from the class of fibres including Tencel®, cotton, and viscose, spinning yarn from this blended fibre into a single yarn, weaving fabric from the blended yarn with other natural yard into fabric, washing the fabric to remove impurities and treating and recycling the water, and using the fabric to make textile products.



Cost-effective laundry detergent compositions comprising green components

Patent No: US20210062110

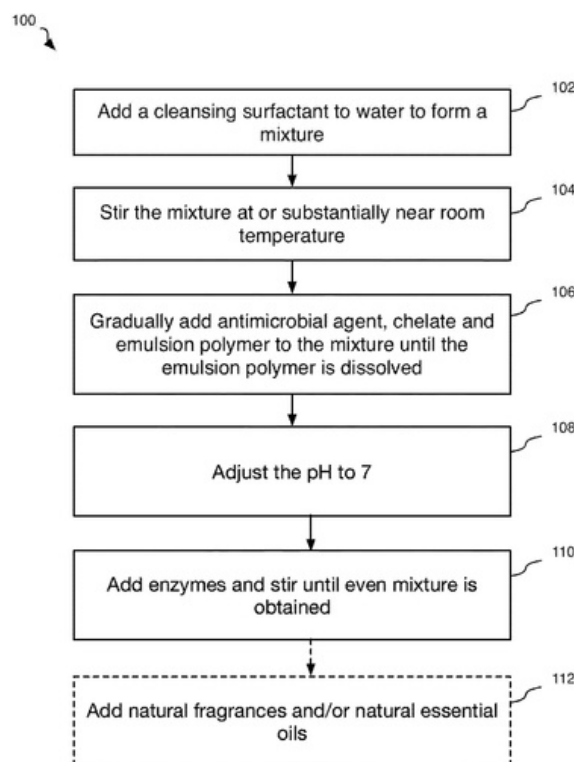
Publication date: 2021-03-04

Applicant(s): Frey brothers

Inventor(s): FREY ERIN ROBERT, FREY LEIF ALEXANDER

Abstract

Provided herein is a green laundry detergent composition that is pH neutral and comprises a powerful cleansing surfactant, an organic and sustainable broad-spectrum antimicrobial agent, a high purity natural, renewable, and biodegradable chelate, an emulsion polymer, a pH adjuster, enzymes, and water. Also provided are methods of producing the green laundry detergent composition and methods comprising the use of the green laundry detergent composition.



Post-consumer resin packaging

Patent No: WO2021/151797

Publication date: 2021-08-05

Applicant(s): CONOPCO, UNILEVER

Inventor(s): DEWSON, Lee, NAIDOO, Yuvesveri

Abstract

The present invention relates to a sustainable article for packaging which could be made substantially free of virgin petroleum-based compounds; in particular, it relates to new packaging made from coloured post-consumer resin (PCR) having a high NIR absorption. A need remains to create a circular economy for coloured and/or black plastic by bringing the waste coloured and black plastic into new packaging while using Near infrared (NIR) detectable pigment in the colourant masterbatch. It is therefore an object of the present invention to bring the coloured or black plastic waste into new packaging. It has been found that a sustainable packaging in consumer acceptable black using NIR detectable pigment can be obtained by using a multilayer post-consumer resin, comprising a thinner outer layer of post-consumer resin of natural plastic waste (N-PCR); and a thicker inner layer comprising at least 50% coloured plastic waste (J-PCR).

	Weight ratio of outer to inner layer	Outer layer material	Wt%	Inner layer material	Wt%
Comp A	20:80	J-PCR	20	J-PCR	80
Ex 1	20:80	N-PCR	20	J- PCR + N-PCR	40+40
Control	20:80	Virgin HDPE	20	Virgin HDPE	80