

USPTO coversheet:

**Collaborative deferred-fee provisional patent application pilot program for COVID-19 invention,
85 Fed. Reg. 58038 (September 17, 2020)**

Identification number	DFPUB_63198742
Date of filing	11/09/2020
Date available to public	11/25/2020
First inventor	Tandon
Title of invention	Prophylactic control of novel pathogens using sunlight
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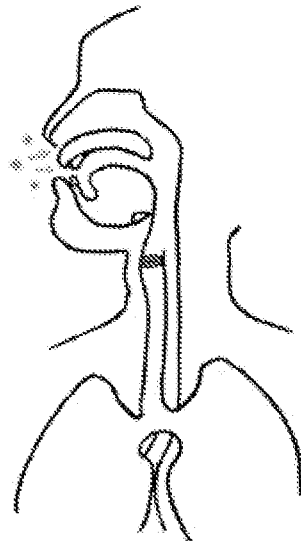


FIG. 1

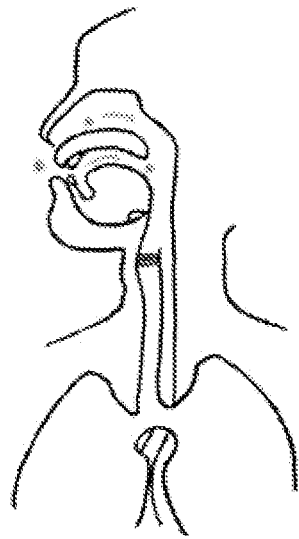


FIG. 2

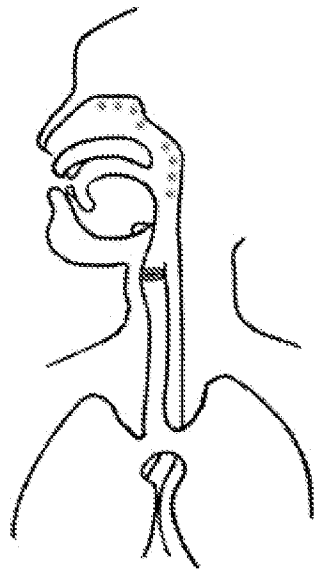


FIG. 3

CONDITION	<i>Temp</i>	<i>Humidity</i>	<i>Solar</i>	HALF LIFE
Surface	70-75°F	20%	None	18 hours
Surface	70-75°F	80%	None	6 hours
Surface	95°F	80%	None	1 hour
Surface	70-75°F	80%	Summer	2 minutes
Aerosol	70-75°F	20%	None	~60 minutes
Aerosol	70-75°F	20%	Summer	~1.5 minutes

FIG. 4

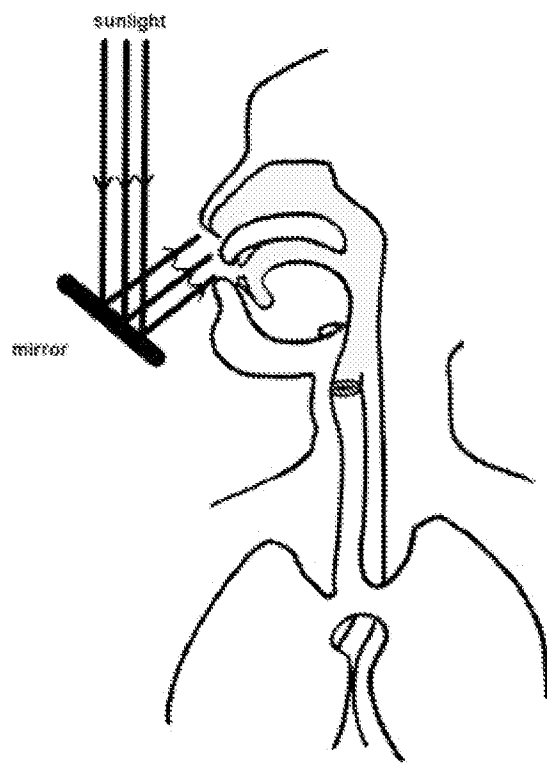


FIG. 5

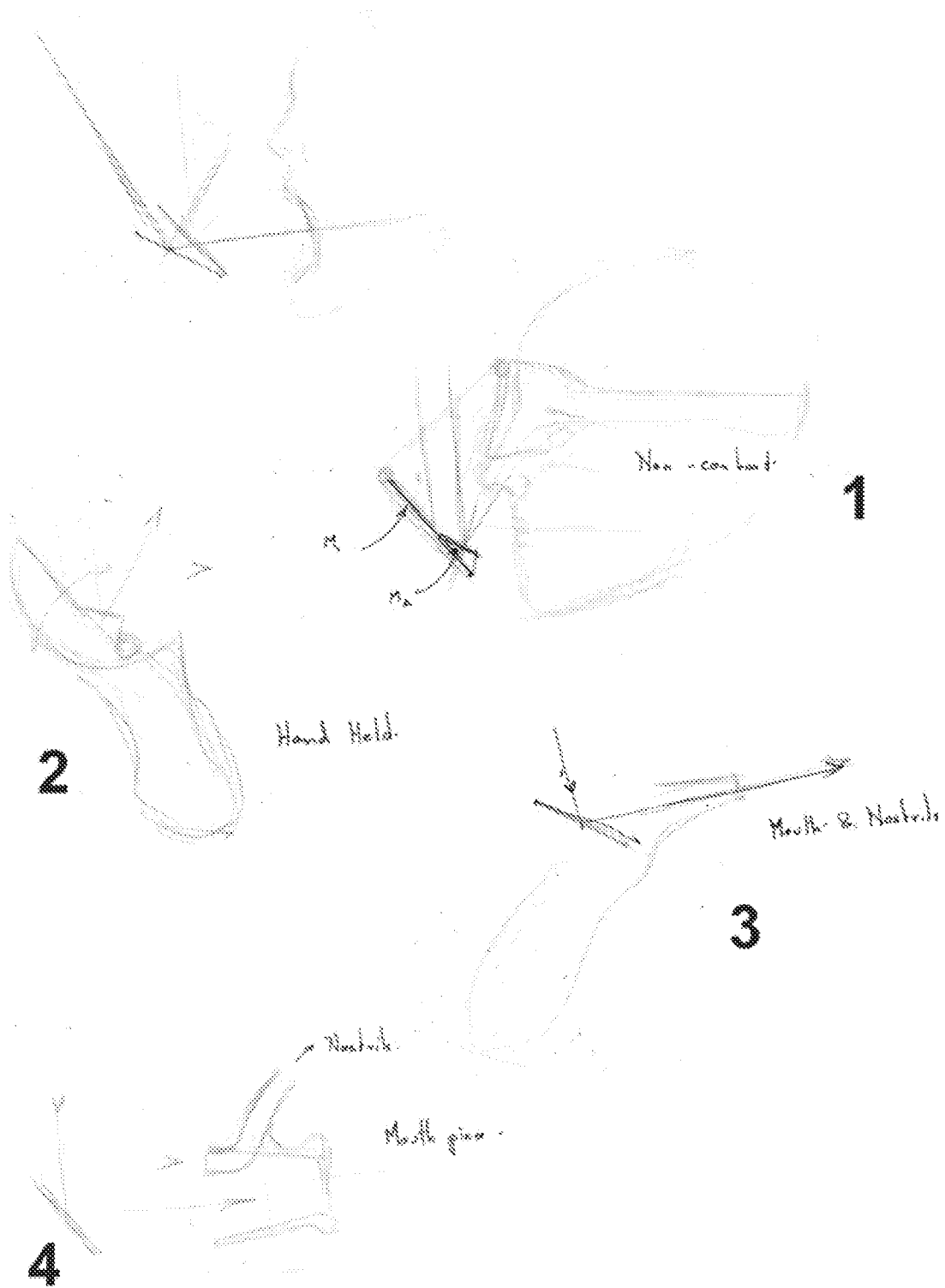


FIG. 6



FIG. 7

Prophylactic Control of Novel Pathogens Using Sunlight

FIELD OF THE INVENTION

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The present invention relates generally to pathogen control. More specifically, the present invention is device that enables the prophylactic control of novel pathogens using sunlight.

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BACKGROUND OF THE INVENTION

Viruses cannot reproduce by themselves. They contain instructions for how to copy themselves but lack the tools and supplies to do it. That is why viruses work in two steps: invade living cells and turn them into virus-making factories. The virus attacks the cells of the nasal passages and the throat (see FIG. 1 and 2).

Incubation period can vary between 2 and 14 days.

The idea behind the present invention is based on a recent DHS (Department of Homeland Security) research paper where application of sunlight rays has shown positive effects on reducing the half-life of the Corona virus (see FIG. 4). Sunlight exposure can reduce this virus growth inside the oral cavity.

BRIEF DESCRIPTION OF THE DRAWINGS

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FIG. 1 depicts how the virus enters the body;

FIG. 2 depicts how the virus continues through the body;

FIG. 3 depicts the virus incubating in the body;

FIG. 4 is a table that shows how sunlight rays reduce the half-life of the virus;

30 FIG. 5 depicts how the present invention works;

FIG. 6 depicts possible configurations of the present invention; and

FIG. 7 depicts another possible configuration of the present invention.

DETAILED DESCRIPTIONS OF THE INVENTION

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All illustrations of the drawings are for the purpose of describing selected versions of the present invention and are not intended to limit the scope of the present invention.

10 The present invention is designed so that the sunlight can penetrate the mouth and nostrils (see FIG. 5). The sunlight is passed through the passages lined with mucous membrane to help kill the disease germs. The present invention can be used as a safe prophylactic by people to continue activities of their daily life like going back to work, meeting friends or going back to school.

15 The present invention can be used to control colds, bacterial or viral infections during the incubation period. This is not a cure for sick patients. The present invention is designed to prevent the virus from multiplication through the natural action of sunlight rays.

20 In one configuration, the present invention consists of two rotatable mirrors, eye cover and mechanism to attach the device to the person's ears or head. The first mirror is used to direct the sunlight into the nasal passages. The second mirror directs the sunlight into the open mouth. Recommended time is about 10-15 mins to reduce the virus from the infected areas. The proposed mirrors are first surface mirrors in order to reflect the full spectrum of sunlight. The person may use the present invention in a standing, sitting or lying down position.

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Possible configurations:

1. An eye mask mounted mirror that reflects sunlight to the mouth and nostrils.
2. A handheld handle mounted reflector.
3. A fixed position mirror with the overall product oriented for the sunlight direction
30 and the snout like end directs the light to the mouth or nostrils.

4. A mouthpiece and fiber optic bundle (for nostrils) that can be used on any of the above 3 configurations.
5. A rotating adjustable mirror with an ear loop.

5 Although the invention has been explained in relation to its preferred embodiment, it is to be understood that many other possible modifications and variations can be made without departing from the spirit and scope of the invention.

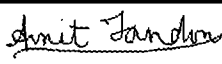
CERTIFICATION AND REQUEST FOR COVID-19 PROVISIONAL PATENT APPLICATION PROGRAM

(Page 1 of 1)

First Named Inventor:	Amit Tandon
Title of Invention:	Prophylactic Control of Novel Pathogens Using Sunlight
Contact information to include in database (optional)	22822 oak knoll dr carson ca 90745

APPLICANT HEREBY MAKES THE FOLLOWING CERTIFICATIONS AND REQUESTS THAT THE USPTO INCLUDE THE DESCRIPTION OF THE ACCOMPANYING PROVISIONAL PATENT APPLICATION IN A PUBLIC DATABASE.

1. The description of the accompanying provisional patent application concerns a product or process relating to COVID-19 and such product or process is subject to an applicable FDA approval for COVID-19 use.
2. The accompanying application is in the English language.
3. The accompanying application is being filed in DOCX format via the USPTO's Patent Center filing system, together with this form.
4. The applicant understands that while the required filing fee for the accompanying provisional application may be deferred by acceptance into this program, the appropriate filing fee must be paid in order for a subsequent U.S. nonprovisional application to claim the benefit of the filing date of the accompanying provisional application. Applicant recognizes that the filing fee due in the future may be more than the current fee due and that by deferring payment of the filing fee, there may be an increase in the total fee due.
5. Applicant authorizes and requests that the description, including the specification and any drawings, claims and/or abstract of the accompanying provisional patent application, as well as this form, be included in a searchable online public database.
6. Applicant understands that inclusion in the public database is a publication of the description and this form.

Signature 	Date 11/06/2020
Name (Print/Typed) Amit Tandon	Practitioner Registration Number

Note: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required.*

*Total of _____ forms are submitted.

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The information provided by you in this form will be subject to the following routine uses:

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3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
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6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
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