CERTIFICATE OF GRANT OF PATENT
批予專利證明書
Patents Ordinance (Chapter 514)
專利條例 (第 514 章)
SHORT-TERM PATENT 短期專利

I hereby certify that a short-term patent with the following particulars has this day been granted 茲證明下述短期專利在今日批予:

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Patent No.專利編號 : HK1060833 **Application No.申請編號 : 04103353.1**

Title of Invention 發明名稱 :
SURFACE TREATMENT OF SARS-INFECTED LUNGS
肺臟非典病菌感染的表面處理

Term of Short-term Patent 短期專利有效期 :
Eight years commencing on 13.05.2004
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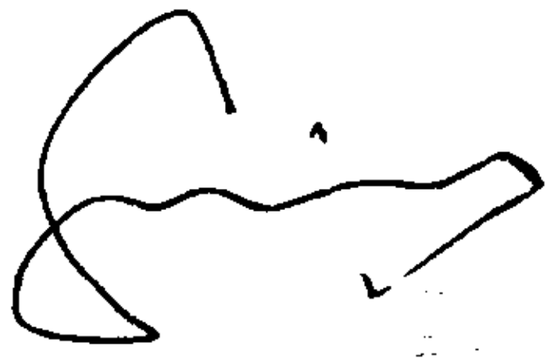
Dated this 23rd July, 2004
二零零四年七月二十三日



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Patents Registry
Intellectual Property Department
The Hong Kong Special Administrative Region
香港特別行政區知識產權署專利註冊處

Please see the important notes overleaf 請細閱背頁的專利所有人須知

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The proprietor shall pay the prescribed renewal fees in accordance with the Patents Ordinance and the Patents (General) Rules. Fees should be accompanied by the specified patent renewal form.

(i) Standard Patents
Under section 39(2) of the Patents Ordinance, the renewal fees shall be paid before the expiry of the 3rd or any succeeding year from the anniversary of the deemed date of filing of the standard patent first occurring after the date of grant but not earlier than a date 3 months before that expiry.

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1. 標準專利及短期專利的有效期

標準專利的有效期爲二十年，由專利申請的當作提交日期起計；而短期專利的有效期則爲八年，由提交專利申請的日期起計。

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專利所有人須遵照專利條例及專利（一般）規則的規定，繳付訂明的續期費。繳付續期費時，須一併遞交指明的專利續期表格。

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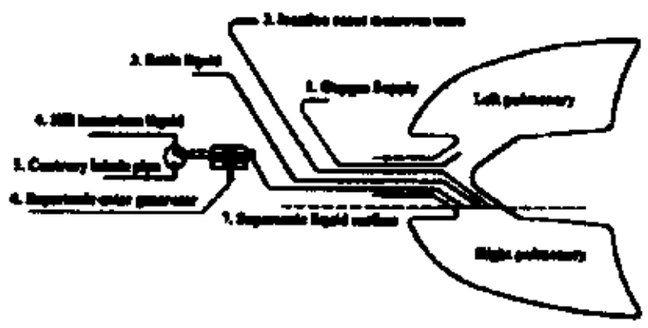
[54] SURFACE TREATMENT OF SARS-INFECTED LUNGS 肺臟非典病菌感染的表面處理

[57] SARS infection has wreaks havoc in China, Hong Kong and Taiwan and its effects sending repercussion throughout the entire international society. The death rate has been high and the Chinese and western medical social were quite helpless about this. For more than hundreds of years, lung infectious diseases have always been classified under medical science as internal organs disease. However, today, this paper will point out that this opinion has been misunderstood. There is a need to associate such infection disease with air as an interface. Therefore, SARS infection is a kind surface ulcerous infection.
Since there have been changes from the above-mentioned medical science opinion, we have found the best medical scheme. It will no longer be a dream for SARS infected patients to be discharge from the hospital in a matter of hours. The SARS infected will no longer be life threatening again. Hence, mankind can proudly declare their triumph over SARS.
"Surface Treatment infected of SARS infected lungs" is under the brand new medical concept of the outcome. The "01 Therapy" is the core of the "Surface Treatment". The sterilizing liquid that is infected in to the lung lobes is the surface treatment liquid for 01 therapy of the lungs. The formal name for this liquid is Per Fluoro Chemical (PFC) and the sterilizing is ozone.
非典病菌感染肆虐並振盪整個國社會，死亡率居高不下，醫學界對此束手無策。百多年來醫學上對肺臟感染疾病都一直只歸類在內臟組織疾病，今天，本文要指出這種醫學解釋的錯誤，因爲必須以空氣爲介面來定義，非典病菌感染首先是一種表面性潰瘍感染的疾病。居於上述醫學解釋的改變，我們找到了最佳的醫療方式，非典病菌的初期感染者到醫院洗個肺幾個小時都可以出院不是夢想，非典病菌不再危害生命，人類可以宣稱打敗非典病菌了! 肺臟非典感染的表面處理是全新醫學概念下的產物，單氧療法是表面處理的核心。在肺中注入溶解了消毒劑的液體，這就是肺臟單氧療法的表面處理液。此液體學名爲液態的全氟化合物(Per fluoro chemicals, PFC)，消毒劑則爲臭氧。



SUBSTIUTE SPECIFICATION

Surface Treatment of SARS-Infected Lungs

I. Background of the invention

Since February 2003 years, SARS infection has wreaks havoc in China, Hong Kong and many other countries in the world. Its effects had send repercussion throughout the entire international society. The death rate has been high and the Chinese and western medical social were quite helpless about this. So China, Taiwan , Hong Kong, Singapore and Canada etc. were listed on travel warning district by World Health Organization and pecuniary loss surmount thousand a hundred million, Mankind is faced with death threat.

Knowing how to treat the SARS virus infection had became the top most urgent matter in the Southeast Asia. During this urgent and difficult period of time, the inventors had came up with an innovative medical scheme to save lives, the newest of medical scheme is "Surface Treatment of SARS-Infected Lungs". Due to the urgency of saving lives, the draft was fax to the Hong kong chief executive and Chinese leader on 15 May 2003. The English version was also forwarded to "WHO-Padey", "WHO-Liden" by Mey-Verme, Mrs Cnia (WDC) and the leaders who were holding the Geneva meeting on 20 May 2003.

II. PREFACE

About the functions of the lungs.

The lungs mainly serve to redistribute the blood from the right ventricle via the lung artery to various lung sub-arteries and capillary vessels in the alveoli, thus achieving gas exchange introducing oxygen and releasing carbon dioxide. Then the blood returns from the lung veins to the left atrium and mixed at a certain proportion in the right ventricle. That is the big circulation of oxygen-containing blood in the arteries providing energy for the body! (Fig. 1.)

Here the medium for gas exchange is not special, just like pumping the air to the bottom of a fish jar to produce bubbles and the oxygen enters the water by rubbing against the external spherical surfaces of the rising bubbles. Our alveoli work like the bubbles in the fish jar and have a large surface area for air contact. The contact area of the dense alveolus tissues in the lungs is up to 70 m^2! Tiny blood vessels are spread over the surfaces of these tissues to complete "gas exchange" or, in other words, pulmonary ventilation, via distribution through the blood, interstitial layer and cells. That is the basic idea of the lungs according to modern medicine.

On the medical history, sort of Lung diseases have been numerous. Tuberculosis used to be an infectious disease difficuit to cure. However, it can be cured 100% thanks to the discovery of multiple antibiotics. Infant pneumonia is also a common disease, not to speak of pneumococcus. This article describes how to treat SARS.

First, treatment by the traditional Chinese medicine. This method mainly relies on absorption function of theintestines and stomach, which impedes the development of the traditional Chinese medicine. Traditional Chinese prescriptions only help the intestines and stomach to share the burden of the liver, thereby improving only our immunity.

However, the prevailing SARS cures at present are based on Western medicine. The Chinese mainland advocates such antibiotics like tetracycline and erythromycin while Hong Kong regards ribavirin and steroid as effective SARS-containing medicines, but in Canada, which had used Ribavirin for a long time, has now stopped using it because it may have serious side effects.

However, no matter how to, the antibiotics is being absorbed by the intestines and stomach or injected via the veins, they cannot change the subject of the method of transporting anti-bacterium factors in the blood. We call this method blood therapy. Because, many elements in the anti-bacterium factors cannot be absorbed by the intestines and stomach, so the Western medicine takes the lead by this therapy.

That is why the medical circles are focusing on how to improve the efficiency of the "anti-bacterium factors".

But, as shown in Fig.2, if the injection point is found in the arteries of the lungs, then the "blood therapy" may become much more effective, as proven by the noticeable flow ratio of the artery and lung circulation. SARS-containing clinical practice is thus more effective. However, we want to point out that the efficiency direction of the "anti-bacterium blood therapy" of SARS is wrong.

As there is a need to define air as an interface, so SARS infection is a kind of surface ulcerous infection. This is a new medical definition, which is likely to revolutionize lung treatment! Therefore we use a familiar industrial term "surface treatment" and to include a technique of supersonic treatment. This is like applying purple liquid medicine to the ulcerous skin which is much more effective than "blood therapy" using any antibiotic.

Up to this point, we can optimistically predict that once the "surface treatment" technique which depends on various antibiotics recommended has found clinic applications, then a SARS patients need only to go to the hospital to have their lungs washed, and SARS will no longer be fatal. At the same time it can also be effective for other pneumonia diseases.

Let's learn something about the physical properties of SARS before dealing with the subject matter of this article—SARS treatment:

1. Fig. 3 is downloaded from the Internet. SARS virus is smaller than 50 nanometers. SARS virus has numerous crown-like developments, making it absorptive. Overcoming such absorption is significant for the "surface treatment" technique recommended in this article. When we contract bacterium-induced faucitis, we just wet our throat with brine and the pain immediately subsides, because some bacteria are "washed away" by brine, as proven by observing under an electronic endoscope. This traditional inflammation relief method through brine is well-known to all. Inspired by this idea, I think such a simple method can also prevent SARS virus from entering the lungs through the mouth and throat.

2. Super-small and super-light virus is visible only through an electronic microscope and the 75-nm N95 standard respirators we use cannot keep out SARS virus, so SARS virus spreads by means of the tiny water droplets and dust particles in the air. In view of that, we can work out a series of effective preventive measures like the "surface treatment" method recommended in this article.

III. Five lung "surface treatment" methods

1. Antibiotic gasification and absorption;
2. Massage and sternutation;
3. Taking out and sterilizing lung lobes;
4. Local quick freezing for sterilizing of lung lobes;
5. Injecting sterilizer into lung lobes.

Discussion 1

The method of antibiotic gasification and absorption is not new. This method is effective at the early stage of infection and may serve as a preventive measure before and after medical operation. This method presupposes that the antibiotic in question must be dissolvable in 37℃ water.

Discussion 2

The method of massage and sternutation is more suitably called physical therapy. It works like this: pressing the alveoli by applying force on the lungs and detaching the virus from the cell wall of the alveoli. Facing the nose toward the sun may help to induce sternutation, which is recommendable at the early stage of infection or as a preventive measure. Therefore sunlight sternutation device will be popular on the market. Sternutation is the best exercise for the chest and lungs, and sneezing three times a day is good for senior citizens. The benefits of such an exercise are hardly known but it is a good piece of news for people with weak lungs. This method is just preventive but not effective in detaching the highly absorptive SARS virus.

Discussion 3

Taking out and sterilizing lung lobes is not just a dream. It involves the invention and clinical application of external blood oxygen adding device. This method includes liquid medicine submersion and temperature difference treatment, the latter being the latest medical concept not only suitable for lung patients but also for cancer patients and others. Further exploration of this method may help to replace antibiotic blood therapy with this method:

a. External liquid medicine submersion is more flexible that internal liquid medicine submersion. There are a few or no Liquid medicines that do not damage alveolus tissues. However, an effective liquid medicine for lung lobe submersion will be more effective and attractive if combined with supersonic wave.

b. What is temperature difference treatment? The organs and virus under treatment have difference physiological temperature curves. Temperature difference effect is achieved by selecting a temperature point which is fatal to viruses but from which the organs treated can revive. It is not important whether this method is recorded in medical literature, but the method proves simple, theessential point is the revival rate of the organ under treatment. This is therefore a highly recommended method.

Discussion 4

Local quick freezing and sterilizing of lung lobes is also based on temperature differences but technically it is an improvement from the above three discussions. Taking out lung lobes without cutting off arteries and veins may minimize the damage to the organ and inter-organ contact, making this method practical. While it is difficult to carry out on Lungs, it is feasible for "semi-detached organs" like. The root of the problem is that the quick-freezing equipment involved is not as simple as an ammonia cyclic refrigerator. The clinic freezing device must work in contact mode and is capable of lowering the temperature of an organ of about 1 kg to -30-50 ℃ within 5 ~ 10 seconds. Many medical fields are gone up and breakthroughs will rely on this kind of technical accomplishment that is made in accordance to the trade circle of science and technology requirement.

Discussion 5

Injecting sterilizer into lung lobes is the subject matter of surface treatment technique of this article. I do not specialize in medicine but just a little medically minded. Inspired by the idea of relieving oral and throat inflammation with brine solution, I managed to find some suitable solvent and sterilizer, but it has to undergo clinical test. But I'm sure that so long as some qualified chemist proposes and there is an adequate range of solvents and sterilizers, SARS will be overcome!

III. O1 Therapy for "surface treatment" of the lungs

The sterilizing liquid injected into lung lobes is the surface treatment liquid for O1 therapy of the lungs. The formal name for this liquid is Per fluoro chemicals (PFC) and the sterilizer is ozone.

This method of introducing supersonic wave with sterilizing liquid may make SARS virus less absorptive and quickly clear viruses in the lungs. This new and practical therapy works like bombing the SARS virus with smart cruise missiles. The missile is single oxygen (O1) separated from ozone, hence "O1 Therapy"!

The effect of the regular antibiotic therapy currently used is limited in that this therapy entails blood exchange, and it is also limited by blood density. For example 50nm-minus SARS virus is hidden in the middle layer that is inaccessible via the capillary vessels, so the mortality rate of this "blood therapy" is still over 10%. The "blood therapy" of Western medicine has reached its maximum potential. On the contrary, "O1 therapy" is highly effective and is likely to reduce the death rate to zero:

1. Selection of PFE solvent;
2. Properties of ozone sterilizer;
3. Mixing of PFC and ozone;
4. Lung "surface treatment" design flow;
5. Test with animal lung;
6. Special of operating table.

1. Selection of PFC solvent

PFC comes to our mind when we select a liquid medium for cleaning alveoli. Clinical cases are available for PFC breathing technique. We can rely completely on such an effective sterilizer or antibiotic to kill SARS virus. PFC has the characteristics:

1. No color, taste or smell, not poisonous;
2. Low surface tensile strength, not dissolvable in water or fat;
3. High dissolving coefficient for oxygen and carbon dioxide, high density and low solubility, higher dissolving coefficient for ozone;
4. Volatile under indoor temperature and body temperature, does not changeable into other matter via catabolism;

Per fluorine chemical compound (Per fluoro chemicals, PFC) in the innovation medicine application of this case is an important liquid-medium of oxygen for separate out single oxygen-atom. The member-type of

PFC are **C(5-18)F(12-38),** the length of chain of member structure was shown at the number of C, the number of C decides was inner physical special quality, so the Boiling-Point was at **30℃-215℃.** That is to say, the Boiling-Point temperature with the number of C is in proportion. This application seeks to first recommend **C6F14 or C7F16,** its purpose for volatilizes as soon as possible then pouring into the lung after destroys the germs. But in actual practice of clinical option, more considerations will have to be taken into account, for instance, the level of ulcer by the germs influence and the density of single oxygen-atom and so on; however, then the other fluorine chemical compounds such as **C5F9H3O** while offering swim-dissociating for the liquid medium of single oxygen-atom, which must emphasize the density effect of single oxygen-atom Depletion Potential.

With the above features, PFC qualifies as a lung surface treatment liquid. It has a dynamic function. On the one hand, oxygen can pass through it to achieve constant gas exchange in the lungs, and on the other hand, the liquid PFC can permeate any alveoli, so that the O1 element in PFC can freely trace SARS virus. The volatility of PFC ensures that no sequela will appear. What is more, PFC can also clean the lungs of damaged cells, cell fragments resulting from inflammation, and SARS virus residuals.

2. Characteristics of ozone sterilizer

1. The molecule formula of ozone is O3, which is an allotrope of high-energy oxygen and is dissolvable in water and various liquid chemicals;
2. Low-density ozone is colorless and smells like a special grass. It is blue at high temperature and its density is 1.5 times that of air;
3. Ozone sterilizes by releasing single oxygen atom to oxidize and damage the cell of the virus, leaving pure O2, which is beneficial to the lungs;
4. Ozone dissolved in water sterilizes more forcibly and quickly, and it is dissolvable in liquid PFC;
5. When the density of ozone exceeds a certain limit, its sterilizing function is just a matter of seconds;

Therefore, ozone is a good choice as an alveoli sterilizer. The following figures are cited from world-recognized experiment documentation for ozone sterilizing.

	Density	Time	Types of viruses and pathogens	Sterilizing efficiency
Ozone sterilizing	10mg/m3	20 mins	Type-B hepatitis surface antigen (HbsAg)	99.99%
	0.5ppm	5 mins	Type-A flu virus	99%
	0.13mg/L	30 seconds	Poliomyelitis virus type I (PVI)	100%
	40μg/L	20 seconds	Coliphage ms2	98%
	0.25mg/L	1 minute	SA-H and human-wheel virus type 2	99.60%
	* 12.6mg/L	**4 minutes**	Coronaviridae	100%
	4mg/L	3 minutes	HIV	100%
	8mg/m3	10 minutes	Mycoplasma, Chlamydia, and other pathogens	99.85%

○ Red indicates every liter of lung surface treatment solution contains 12.6mg ozone, which may serves as a reference when we consider the test dosage of ozone.

3. Mixing of PFC and ozone

The working process-method of mixing the PFC and ozone are shown in Fig.4. Fig.4-1 shows the ozone supply; Fig.4-2 shows the O3 Contriver; Fig.4-3 shows the PFC supply; Fig.4-4 shows the passageway valve of liquid; Fig.4-5 shows the pump of gas and liquid mixing; Fig.4-6 is the mix vessel; Fig.4-7 is the digital type tester of ozone density which has the export-ability to brake of the working of the mixing pump; Fig.4-8 is the controller of altitude of liquid and have the export-ability to the working of the passageway valve of liquid.

4. Lung "surface treatment" flow

The treatment flow takes the treatment for example of the right lung, while reserving the breath of the left lung for the time being. The final purpose is to treat both lungs at the same time. Process 3 can only be used only after process 4. Test it with animal lung, before applying it on human. It must be noted that the test with animal lung is intended to prove that it applies to process 3, the human body treatment. The advantage of the reverse

sequence is time saving.

a. Surface treatment clinic (must be professional anesthetist except for bio-chemical test of body energy): (Fig. 5)

b. Surface treatment clinic scheme diagram: (Fig. 6)

5. Test with animal lung

Test with animal lung includes two stages: test with one lung of the baby pig and test with both lungs. This process simulates process 3, as specified below:

a. Inject pure PFC into three without virus influence of baby pig:

Baby pig	Pure PFC injection 10 mins			Pure PFC injection 30 mins			Pure PFC injection 120 mins		
	Change of blood oxygen amount	Heart pulses	Symptom description	Change of blood oxygen amount	Heart pulses	Symptom description	Change of blood oxygen amount	Heart pulses	Symptom description
1									
2									

b. Inject 12.6mg/L PFC into three virus-free pig to test its reaction to high-density ozone:

Baby pig	Pure PFC injection 10 mins			Pure PFC injection 30 mins			Pure PFC injection 120 mins		
	Change of blood oxygen amount	Heart pulses	Symptom description	Change of blood oxygen amount	Heart pulses	Symptom description	Change of blood oxygen amount	Heart pulses	Symptom description
1									
2									
3									

c. Inject 25.2mg/L PFC into three virus-free pig to test its reaction to high-density ozone:

Baby pig	Pure PFC injection 10 mins			Pure PFC injection 30 mins			Pure PFC injection 120 mins		
	Change of blood oxygen amount	Heart pulses	Symptom description	Change of blood oxygen amount	Heart pulses	Symptom description	Change of blood oxygen amount	Heart pulses	Symptom description
1									
2									
3									

d. Inject 12.6mg/L PFC into three infected of baby pig to test its reaction to high-density ozone:

Baby pig	Pure PFC injection 10 mins			Pure PFC injection 30 mins			Pure PFC injection 120 mins		
	Change of blood oxygen amount	Heart pulses	Symptom description	Change of blood oxygen amount	Heart pulses	Symptom description	Change of blood oxygen amount	Heart pulses	Symptom description
1									
2									
3									

Note 1. The above a-c tests are intended to test whether PEC solvent with or without ozone has bad effect on the lungs. In test c, the density of ozone can be further increased until a reliable pig lung reaction curve, which may serve as a reference for chemists for preparing prescriptions for human treatment.

Note 2. Test d is intended for SARS inflammation, needing an infected pig. Tests with difference densities can be worked out by analogy, but the baby pig under the test is much more resistant to diseases than man. Usually, after 1-3 medicine reaction tests, similar results can be obtained in the tests with various dosages and can be observed under a microscope, and the bio-chemical lab can work out a guided report for the chemists in a short time. The test planning is for your reference only.

6. Important points in designing the operation table

The operation table should be designed such that it can turn horizontally so that the patient on the table can turn left or right with an angle of at least 45 degrees to facilitate the treatment of the left and right lungs.

V. Conclusion

From the viewpoints mentioned above, the ability of ozone to kill virus was recognized worldwide, ozone application in the PFC solvent was confirmed by 1 of remark of the famous production businesses, the PFC solvent used in the lung had also supported by 2-8 of remark of medical document. Therefore, combining the PFC solution and ozone together will attack the SARS virus in no time. The [method] medicine scheme will definitely treat the SARS virus infection and there will be no side effect at all. This invention will save many lives and change medical-history for lung Infection-Disease.

The handling effect of difference in temperature of invention's theory can also kill dead cancer-cell under completely no side effect, the effect of medical treatment cannot compared with Electrotherapy and Chemotherapy, hence the invention bring Gospel for cancer patient, it was so far the brand-new medical concept and brand-new medical method of "Frozen-Therapy".

-end-

Remark of Paper/WebPages:

1. http://cms.3m.com/cms/US/en/2-68/iFcFiFM/view.jhtml
2. http://www.vghtpe.gov.tw/~clinmed/ (Taiwan 89 年 12 月期) [Chinese]

Paper in international journals:

3. Jeng MJ, Kou YR*, Sheu CC, Hwang B. Effects of Exogenous Surfactant Supplementation and Partial Liquid Ventilation on Acute Lung Injury Induced by Wood Smoke Inhalation in Newborn Piglets. Crit Care Med 2003; 31:1166-1174
4. Jeng MJ*, Yang SS, Wolfson MR, Shaffer TH. Perfluorochemical (PFC) Combinations for Acute Lung Injury: An in Vitro and in Vivo Study in Juvenile Rabbits. Pediatr Res 2003;53:81-88.
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6. Jeng MJ*, Kou YR, Sheu CC, Hwang B. Effects of partial liquid ventilation with FC-77 on acute lung injury in newborn piglets. Pediatr Pulmonol 2002; 33:12-21.
7. Jeng MJ*, Trevisanuto D, Weis CM, Fox WW, Wolfson MR, Shaffer TH. The role of ventilation strategy on Perfluorochemical (PFC) evaporation from the lungs. J Appl Physiol 2001; 90: 1365-1372.

Trevisanuto D, Jeng MJ*, Weis CM, Fox WW, Wolfson MR, Shaffer TH. Positive end-expiratory pressure modulates perfluorochemical evaporation from the lungs. Biol Neonate 2003;84:53-58.

Surface Treatment of SARS-Infected Lungs

The specify of Figure 1-6

Fig. 1. The big circulation of oxygen-containing blood in the arteries providing energy for the body.

Fig. 2. The diagram contrast for efficacy between the injection points of lungs treatment.

Fig. 3. A photomicrograph of SARS virus.

Fig. 4. The working process-method of mixing the PFC and ozone.

Fig. 5. Diagram of Surface treatment clinic

Fig. 6. A block diagram of Surface treatment clinic.

Surface Treatment of SARS-Infected Lungs

PCT/SG03/00145

Claims A

(Use for medicine patent by patent-law of country only)

1. The liquid medicine name of "Surface Treatment of SARS--Infected Lungs" is Per Fluoro Chemicals (PFC) mixing ozone forming a medicine.
2. In the claim 1, the liquid includes all liquids of fluorine element.
3. In the claim 1, includes any substitute liquid to mixing ozone or the single oxygen is decompose by other element.
4. In the Claim 1 of liquid medicines include the option of mixing any chemical that might kill or restrain the germs, for instance any antibiotics or other bactericide and so on.
5. In the Claim 1, includes any other lung diseases and SARS inflammation.

Fig. 1

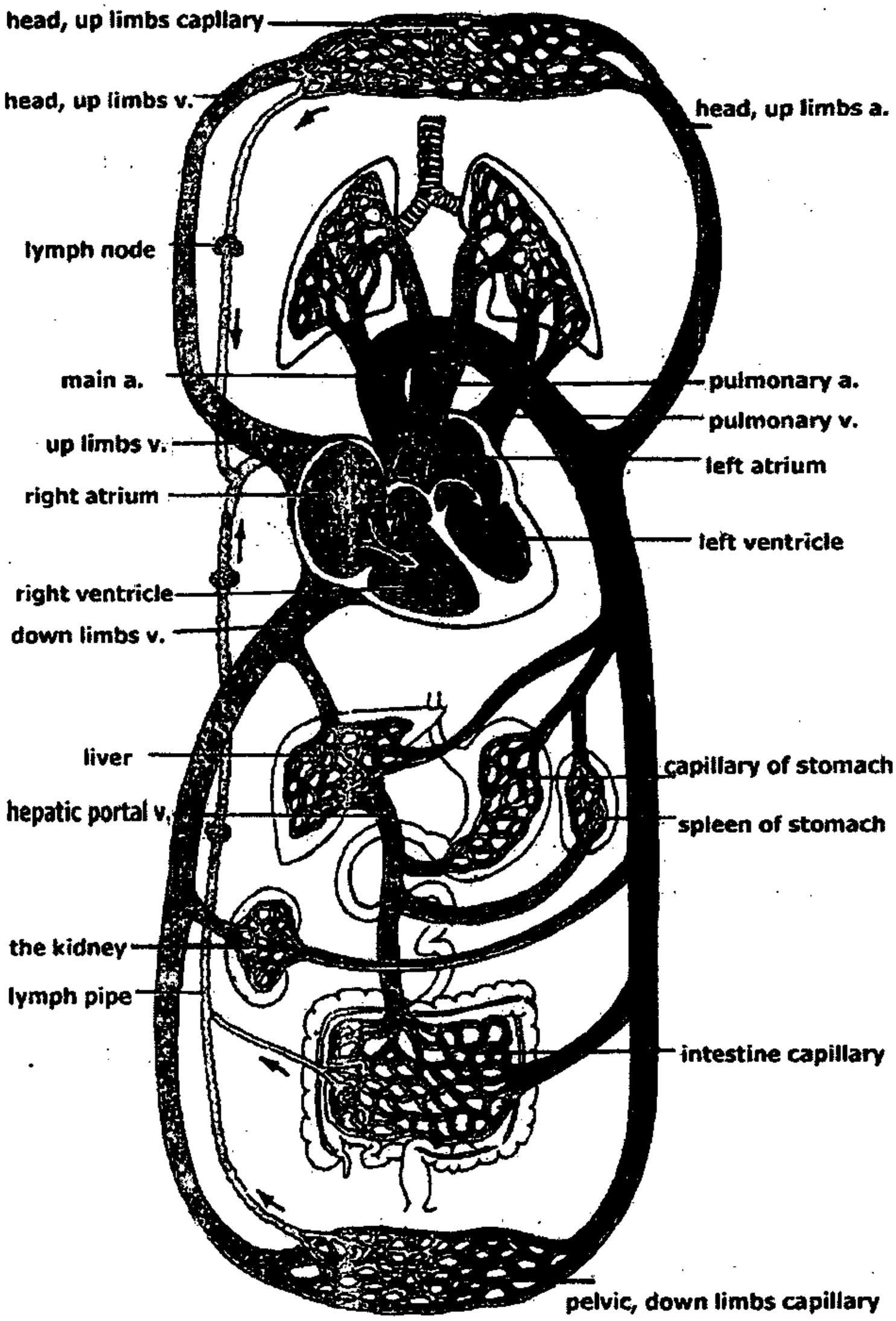
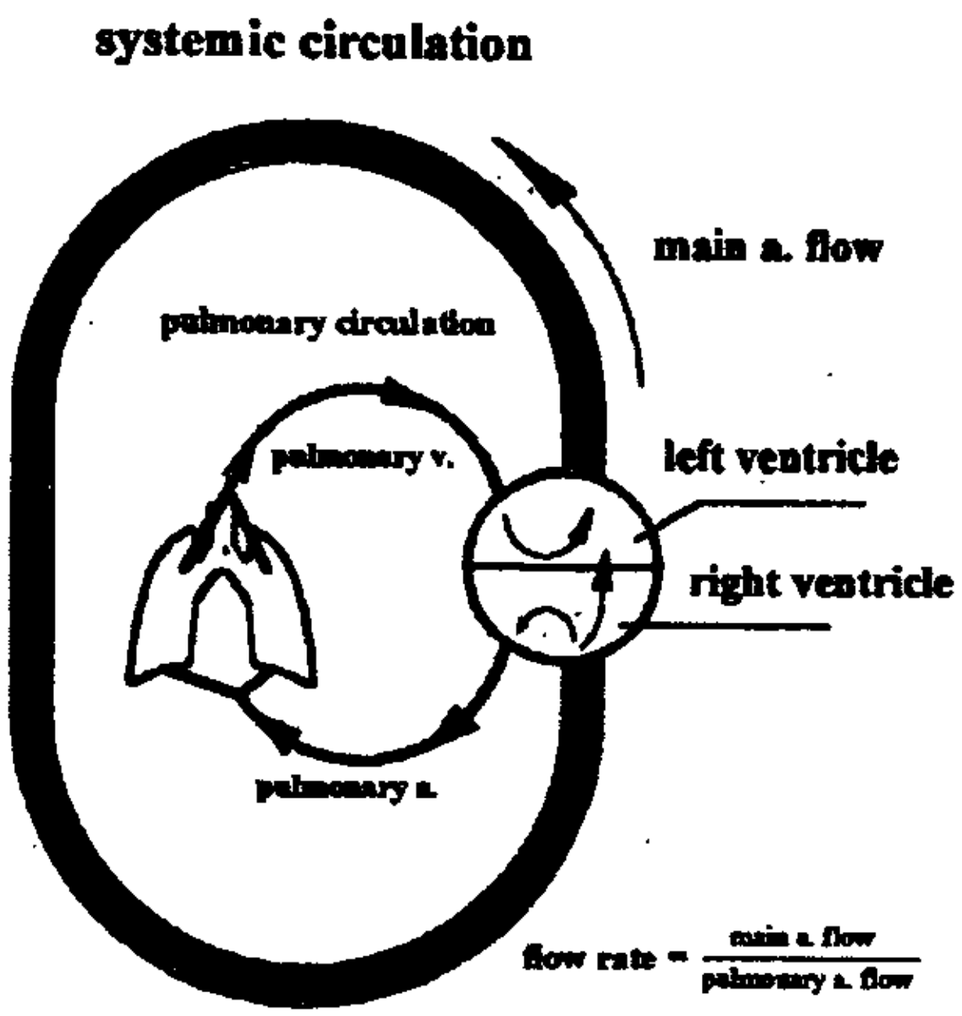

head, up limbs capillary
head, up limbs v.
head, up limbs a.
lymph node
main a.
pulmonary a.
pulmonary v.
up limbs v.
left atrium
right atrium
left ventricle
right ventricle
down limbs v.
liver
capillary of stomach
hepatic portal v.
spleen of stomach
the kidney
lymph pipe
intestine capillary
pelvic, down limbs capillary

Fig. 2.



The flow ratio of the aorta to that of the lung artery is a constant, therefore the effect of the medicine will improve radically if a proper point of injection is found in the lung artery.

Fig. 3.

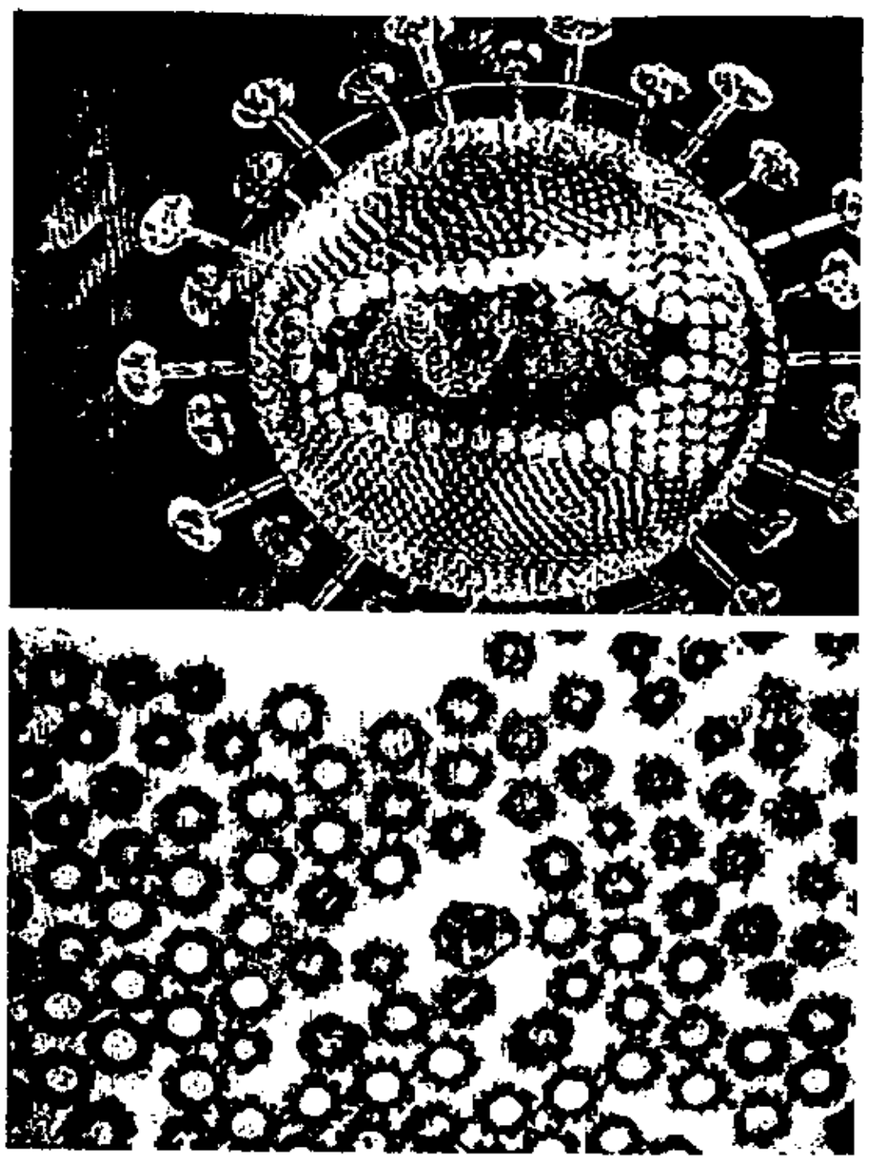
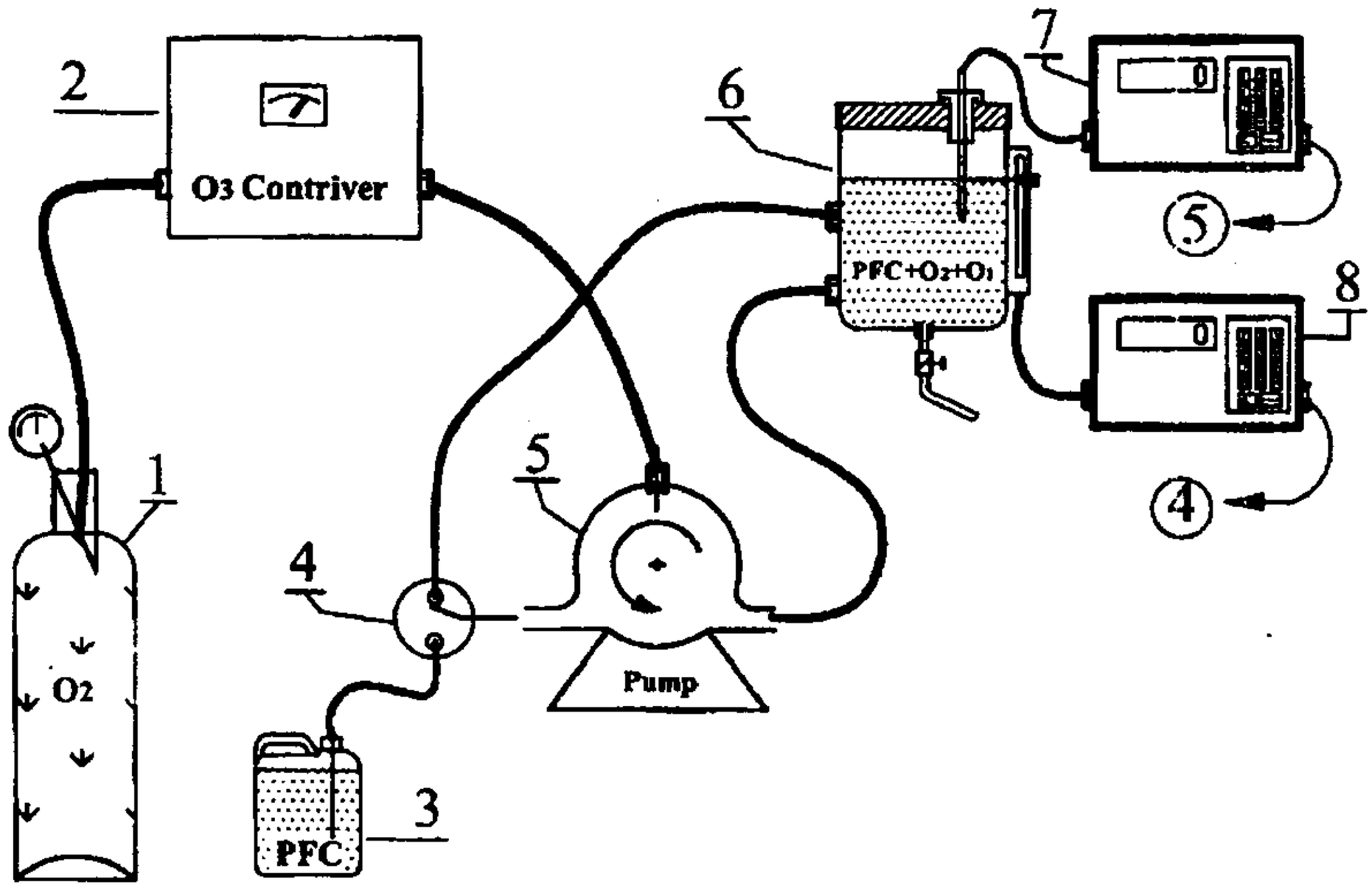
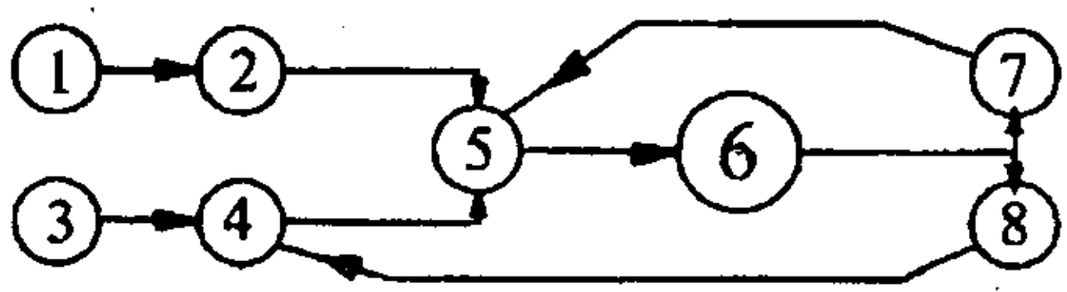


Fig. 4.



A. Automatic mixing-process:



B. Manpower mixing-process:

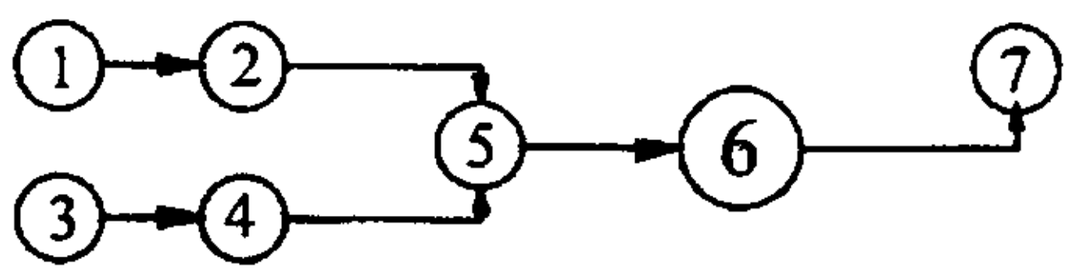


Fig. 5.

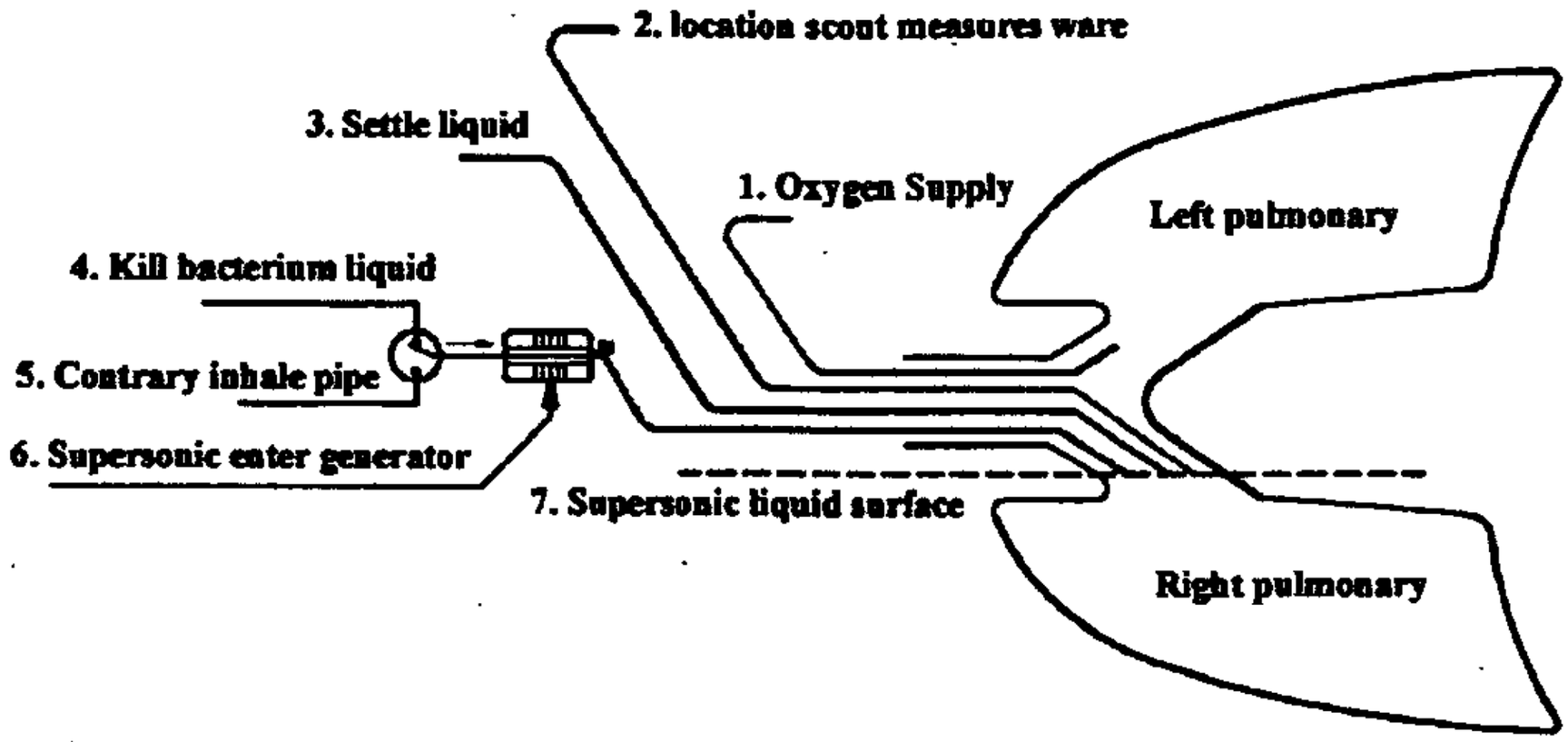
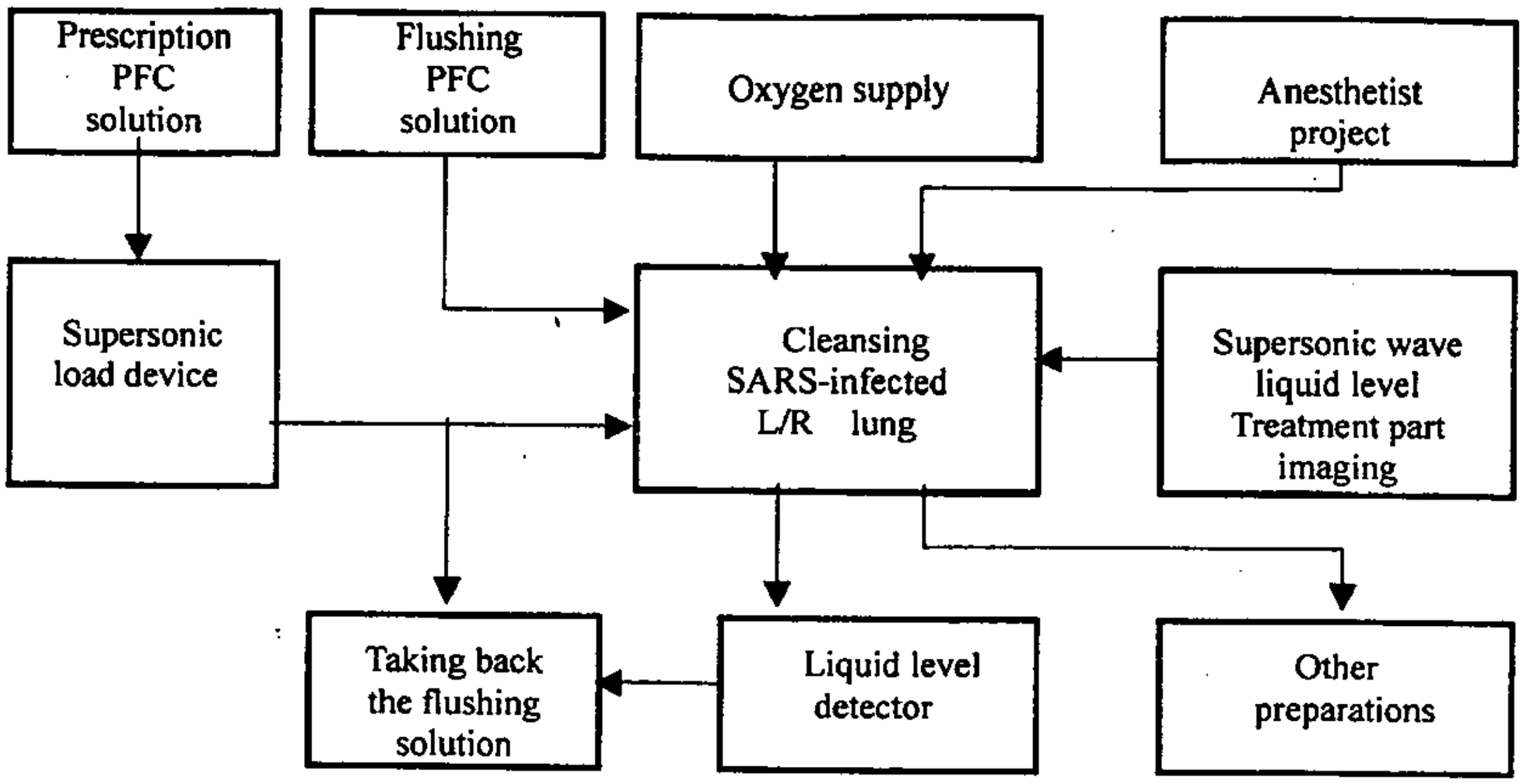

2. location scout measures ware
3. Settle liquid
1. Oxygen Supply
Left pulmonary
4. Kill bacterium liquid
5. Contrary inhale pipe
6. Supersonic enter generator
7. Supersonic liquid surface
Right pulmonary

Fig. 6


Prescription PFC solution
Flushing PFC solution
Oxygen supply
Anesthetist project
Supersonic load device
Cleansing SARS-infected L/R lung
Supersonic wave liquid level Treatment part imaging
Taking back the flushing solution
Liquid level detector
Other preparations

K 1060833 A

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER ACTION	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. PCT/SG 2003/000145	International filing date (*day/month/year*) 12 June 2003 (12.06.2003)	(Earliest) Priority Date (*day/month/year*)
Applicant LIN ZHEN-MAN		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☒ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (See Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.: 4

☒ as suggested by the applicant. ☐ None of the figures.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

K 1060833 A **INTERNATIONAL SEARCH REPORT**

International application No.
PCT/SG 03/00145-0

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 1-4
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 1-4 are directed to therapeutic methods of treatment of the human/animal body, the search has been carried out and is based on the alleged effects of the composition.

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

K 1060833 A

INTERNATIONAL SEARCH REPORT

International application No.
PCT/SG 03/00145-0

CLASSIFICATION OF SUBJECT MATTER

IPC[7]: A61K 31/02, A61L 9/015

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC[7]: A61K, A61L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI, EPODOC, PAJ, medline, internet, CAS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6242472 B1 (SEKINS et al.) 5 June 2001 (05.06.2001) *claims.*	1-4
Y	SUNNEN G.V.,"SARS and OZONE Therapy: Theoretical Considerations", May 2003 [retrived on 11 February 2004 (11.02.2004)] Retrieved from the Internet:<URL: http://www.triroc.com/sunnen/topics/sars.html> *the whole document.*	1-4
Y	DE 10000823 A1 (HOBLER H.) 19 July 2001 (19.07.2001) *the whole document.*	1-4

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:
„A" document defining the general state of the art which is not considered to be of particular relevance
„E" earlier application or patent but published on or after the international filing date
„L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
„O" document referring to an oral disclosure, use, exhibition or other means
„P" document published prior to the international filing date but later than the priority date claimed

„T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
„X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
„Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
„&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
9 March 2004 (09.03.2004)	5 April 2004 (05.04.2004)
Name and mailing adress of the ISA/AT Austrian Patent Office Dresdner Straße 87, A-1200 Vienna Facsimile No. 1/53424/535	Authorized officer KRENN M. Telephone No. 1/53424/435

Form PCT/ISA/210 (second sheet) (July 1998)

K 1060833 A

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/SG 03/00145-0

Patent document cited in search report			Publication date	Patent family member(s)	Publication date
	A			none	
DE	A	10000823	2001-07-19	none	

香港特別行政區政府知識產權署專利註冊處
Patents Registry, Intellectual Property Department
The Government of the Hong Kong Special Administrative Region

知識產權署
Intellectual Property Department

覆函請註明本處檔號:

來函檔號:

電話: 29616833

圖文傳真: 2838 6315

林哲民
觀塘興業街 14-16 號
永興工業大廈 13/F C-4

掛號郵件

短期專利的批予

按照《專利條例》第 118(2)(b)條的規定，我現把有關下列短期專利申請的批予專利證明書寄給你：

申請編號	來信檔號
04103353.1	

本函由 葉肖英 代表專利註冊處處長發出。

(本函屬電腦編印文件，毋須簽署。)

二零零四年七月二十三日

備註: 1. 現把上述專利已發表的香港說明書及查檢報告一併寄給你。

地址 : 香港皇后大道東二百一十三號胡忠大廈二十四樓
Address: 24th Floor, Wu Chung House, 213 Queen's Road East, Hong Kong.
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