

Tuesday, 2 July 2013

(10.35 am)

(Hearing in chambers)

(10.58 am)

COURT: Yes.

MS GAN: May it please you, sir.

Suit No. 619 of 2012R. Sir, my name is Ms Gan Kam
Yuin, I appear for the plaintiffs, with your Honour's
leave may I have with me my instructing solicitor,
Ms Audrey Yap, and Mr Daniel Chan.

COURT: Yes.

MS GAN: Your Honour, may I also have with your permission
a practice trainee from my firm, and an intern. I'm
obliged, your Honour.

In terms of the plaintiff's representative, that
would be Dr Ting Choon Meng.

Before I begin with marking the bundles, perhaps my
learned friend would like to --

MR LECK: Good morning, your Honour, I'm Andy Leck for the
defendants, I appear together with my colleagues
Ms Celeste Ang, Mr Sheik Umar.

Your Honour, may I have also the court's leave for
our trainee, who is presently not here, I think he is
outside, Mr Lucas Lim appear together with us.

We actually do have representatives from the

1 10:58 Attorney-General's chambers, Ms Elsie Lee also from
2 MINDEF Mr Paul Lee, who is behind. And your Honour,
3 together with me, as well, is the expert Mr Fred Smith.

4 Your Honour, before my learned friend begins with
5 the marking of documents, I just have one issue in
6 relation to the plaintiff's corporate representative,
7 given that we understand that my learned friend will be
8 calling Dr Mak as the first witness, I thought we should
9 just have this issue dealt with as to whether Dr Ting
10 should be permitted to be present in the course of the
11 cross-examination, as both of them will be providing
12 testimony.

13 COURT: Does it matter in a matter of this nature, really?

14 MR LECK: Only in relation, your Honour, that both of them
15 are co-inventors, and some of the questions are going to
16 be identical, your Honour.

17 COURT: Are they both directors of the company?

18 MR LECK: They both are, yes.

19 COURT: Then they are entitled to be here. Anyway, the
20 nature of the case is such that I don't think there is
21 much room for you to manoeuvre on the facts, so
22 I shouldn't be too concerned about witnesses sitting in
23 really.

24 MR LECK: Agreed, your Honour.

25 MS GAN: Grateful, your Honour. There was one more person

1 11:00 I forgot to mention. Again, with your Honour's leave,
2 would your Honour permit I'm assisted by the plaintiff's
3 expert Dr Heng, during cross-examination in particular?

4 COURT: Sure.

5 MS GAN: I'm grateful.

6 The plaintiff's opening statement was filed and
7 served. May I take it that your Honour can treat that
8 as having been read?

9 COURT: Yes.

10 MS GAN: The bundle of pleadings, would your Honour have
11 that admitted and marked BP1 to 85?

12 COURT: Okay.

13 MS GAN: Sir, the plaintiffs have bundled the affidavits of
14 evidence-in-chiefs into three volumes, would your Honour
15 wish those to be admitted and marked?

16 COURT: We will just refer to them as the plaintiff's
17 affidavit of evidence-in-chief.

18 MS GAN: As your Honour pleases. In terms of marking the
19 agreed bundle, your Honour, the agreed bundle comes in
20 two bundles. Your Honour has it as volume 1 of 2,
21 pages 1 to 580. Does your Honour wish that 1AB 1 to
22 580? And correspondingly 2AB 581 to 1328?

23 COURT: Yes.

24 MS GAN: I'm obliged.

25 The plaintiffs call PW1, Dr Mak Koon Hou. Dr Mak's

1 11:01 AEIC is found in volume 3 of the plaintiff's bundle
2 volume 2.

3 DR MAK KOON HOU (sworn)

4 Examination-in-chief by MS GAN

5 COURT: Sit down please.

6 A. Thank you, your Honour.

7 MS GAN: Your full name is Mak Koon Hou. Your address is
8 18B Balmoral Crescent, Singapore, 259914.

9 A. Yes, that's correct.

10 Q. Dr Mak, looking at the document that is before you, that
11 is headed "affidavit in evidence-in-chief" would you
12 turn to page 2 and identify whether that is your
13 signature?

14 A. Yes, that is correct.

15 Q. Do you have any changes, amendments or clarifications
16 you need make to this affidavit, Dr Mak?

17 A. No, I do not have.

18 Q. Do you confirm then that this affidavit constitutes the
19 evidence you wish to give in these proceedings and the
20 contents are true and accurate?

21 A. Yes, that's correct.

22 MS GAN: I offer the witness for cross-examination.

23 Cross-examination by MR LECK

24 MR LECK: Obligated, your Honour.

25 With the court's leave I will begin the

1 11:03 cross-examination.

2 Dr Mak, I'll be referring to your affidavit of
3 evidence-in-chief, from time to time I'll refer to
4 Dr Ting's affidavit of evidence-in-chief as well, and
5 to, you know, the agreed bundle. Do you have a copy of
6 the agreed bundle next to you?

7 There will be two volumes, 1 and 2.

8 Your Honour, I'll begin with the personals.

9 Dr Mak, you are a medical doctor by training?

10 A. Yes.

11 Q. You are qualified as a MBBS, Bachelor of Medicine, as
12 well as a Masters of Medicine, correct?

13 A. Yes, I graduated from the National University of
14 Singapore with the degrees: Bachelor of Medicine, and
15 Bachelor of Surgery, which stands for MBBS, Master of
16 Medicine, Internal Medicine, National University of
17 Singapore, and Doctor of Medicine National University of
18 Singapore.

19 Q. Dr Mak do you have additional academic qualifications
20 apart from what you have listed?

21 A. Yes, I do. I'm the member of the Royal College of
22 Physicians of the United Kingdom, a fellow of the
23 College of Physicians and Surgeons of Glasgow, a fellow
24 of the -- sorry, a fellow of the Royal College of
25 Physicians of Edinburgh, a fellow of the Academy of

1 11:04 Medicine of Singapore, a fellow of the American College
2 of Physicians, a fellow of the American College of
3 Cardiologists, a fellow of -- sorry, the European
4 Society of Cardiology.

5 Q. Dr Mak, are you qualified as an engineer?

6 A. No, I'm not an engineer, I am a medical doctor.

7 Q. Are you still in practice as a medical doctor?

8 A. Yes, I am.

9 Q. How much time do you devote on research to develop new
10 inventions?

11 A. I cannot exactly quantity my time but I do spend some
12 time in doing research, both clinical research and other
13 research.

14 Q. Dr Mak, I understand that you have applied for one
15 patent in Singapore, and you have one registration in
16 Singapore, correct?

17 A. I have other patents that have been applied in Singapore
18 and has been approved. One that has been applied and
19 has been approved, and one, I think, that has been
20 applied and is pending.

21 Q. The one that has been applied and registered, that is
22 the patent Mobile First Aid Post, correct?

23 A. Yes, this is one of the patents that has been approved.

24 Q. I'm just going to refer to this patent as the subject
25 patent, okay?

1 11:06 A. Thank you.

2 Q. Now, you are a director of the plaintiff's company,
3 Mobilestats, you are also a shareholder, correct?

4 A. Yes, I am.

5 Q. And along with your co-inventor of the subject patent,
6 Dr Ting, you assigned the patent to your company
7 Mobilestats on 8 August 2011?

8 A. Yes, we did.

9 Q. So that's about one month before the commencement of
10 these proceedings, correct?

11 A. I cannot be sure but, if that is the case.

12 Q. Can I find out the reason why you assigned the patent to
13 the company?

14 A. I think all this business, in terms of assigning the
15 patent to the company, I left a lot of this discretion
16 to the chairman, who is Dr Ting.

17 Q. Now, Mobilestats is described in the ACRA Search Report
18 as a company in the business of research and
19 experimental development of natural sciences, as well as
20 wholesale machinery and equipment. My question: Does
21 Mobilestats manufacture mobile medical vehicles?

22 A. Mobilestats does not manufacture vehicles.

23 Q. Does Mobilestats sell mobile medical vehicles, which
24 I shall refer to as MMV for short?

25 A. Mobilestats works with other construction companies to

1 11:08 facilitate the sale of vehicles.

2 Q. In other words, Mobilestats licences its subject patent
3 to licensees who build the MMVs for sale, correct?

4 A. Mobilestats have licenced companies to build vehicles
5 for sale.

6 Q. That is the business model?

7 A. That is the business model that you mentioned.

8 Q. Are there other business models?

9 A. There are other softer business models that we may go
10 by, in terms of letting people know and cooperating with
11 other companies, in terms of developing these kind of
12 vehicles.

13 Q. In terms of how the company generate revenues, apart
14 from the licensing model what are the other models?

15 A. We have tried to build other companies, work with other
16 companies, in terms of helping them to interest them to
17 build this vehicles.

18 Q. But that is not revenue generating, correct?

19 A. At the moment, it is not revenue-generating yet.

20 Q. I will move on to your relationship with Dr Ting. Dr
21 Ting is a shareholder of Mobilestats. Did you serve
22 with Dr Ting in the Singapore Civil Defence Force?

23 A. Yes, we were in the Singapore Civil Defence Force during
24 our training as reservists.

25 Q. When did you first know Dr Ting?

1 11:09 A. Sometime in medical school, we have known each other,
2 because we are in medical school one year apart.

3 Q. Dr Ting spends half his time as a practicing medical
4 doctor, correct?

5 A. As to what Dr Ting does with his time and his business,
6 I think it is better to ask him, because I have my own
7 work to deal with.

8 Q. Are you close to Dr Ting?

9 A. I do not understand that question, what do you mean by
10 "close"? We, time to time, do talk to one another.

11 Q. Would you consider him as a close friend?

12 A. I would consider him as a friend.

13 Q. Is Dr Ting a trained mechanical engineer?

14 A. I think questions regarding Dr Ting, I'm not sure
15 whether I should answer on his behalf, because he has
16 trainings that I may not know of, that I'm not sure.

17 Q. I'm only asking a very simple question. He is your
18 shareholder, he is also your fellow director, surely you
19 take an interest as to who your director is?

20 A. Yes, we do, but as to -- we are doing a business of
21 getting this vehicle, and as to whether he is a trained
22 engineer or not, I mean, I do not have the information.
23 As far as I know, I do not have any information on that.

24 Q. Then, you know, "I don't know" will suffice.

25 A. I don't know if Dr Ting is a trained engineer.

1 11:11 Q. I'll move on to the issue of novelty, your Honour. How
2 did you come to invent this subject patent?

3 A. This Mobile First Aid Post, as you know, was something
4 that I was working with, in terms of what we have seen
5 in September 9 2001. On that day I was actually in
6 Washington DC, quite near to the Pentagon when all these
7 things were happening. And I was having a meeting in
8 this Washington, DC, and everything came to a
9 standstill, because of the events that happened in
10 New York City and Washington, DC.

11 At that time, previously, I have served in the
12 Singapore Armed Forces in the batallion casualty
13 station, in medical companies, and in the combat support
14 hospitals, and one of the things that we felt, in terms
15 of a civil disaster like that, was the availability
16 of -- rapid availability of medical treatment and
17 management for patients. And while I reviewed my time
18 during those services, I found that an important missing
19 element in what we are doing is how fast the first aid
20 post can be deployed.

21 So, therefore, together we come out with something
22 that we hope to make this happen, to make things better
23 for our people, and for civil disaster, and make things
24 better for Singapore. And Dr Ting and I work closely,
25 in terms of this invention, in terms of developing it

1 11:13 into a more rapid deployment to make medical equipment
2 and treatment more readily available and faster for the
3 casualties that we expect.

4 This in short is what happened.

5 Q. Between you and Dr Ting, were you the first person to
6 conceive this idea?

7 A. I think both of us conceived the idea, exactly who
8 conceived it first, I cannot recall because it is many
9 years ago.

10 Q. Can you explain to the court how this idea of
11 having movable panels came about?

12 A. We thought one of the important features, in terms of
13 deployment, if I may, in the previous time, is we put
14 everything in the three-tonner, or a big lorry, a big
15 truck, then the soldiers, or the members of the forces,
16 would have to come down and quickly deploy -- make --
17 build a tent, what we call a 20-man tent. And this
18 usually, together after that you build a tent, you have
19 to put all the medical stalls into the tent to make it
20 ready, and to be in operation to treat patients. That
21 generally, the fastest, is maybe 20 minutes, maybe less,
22 so we thought that it takes a lot of time.

23 What we felt -- most of the -- when a rescue element
24 with medical people around, there will be -- sorry,
25 casualties are already being pulled out by maybe the

1 11:14 firemen, helpful citizens that are on the floor, and
2 they pull them out, they are all on the floor around the
3 place. As you can see in the 7/7 incident in London
4 too, you see that everybody was on the floor, so when
5 the medical element comes, there are already injured
6 people that are lying, and we need to treat them as soon
7 as possible.

8 And we thought hard: how do we meet this need? And
9 I think the fastest need is to deploy this vehicle fast.
10 And to do it fast, we need to open fast and have medical
11 equipment set up within five minutes, so that those who
12 really need treatment, especially those who need
13 life-saving treatment, can receive immediately, to not
14 wait for people to build tents, and carry stalls, which
15 are wasted. What we call the golden hour of treatment,
16 whereby we need get this set up straight away and done
17 it immediately.

18 So that's how we thought that it is important for us
19 to make it open fast, deploy fast, have the medical
20 elements ready fast, and then we are ready and treat
21 patients fast, because that's what we are supposed to
22 do.

23 Q. In relation to this movable panel, I'm just centring on
24 the movable panel again, were there any drawings that
25 were conceived?

1 11:16 A. There was multiple drawings that were conceived.

2 I think the final drawings are in the patent application
3 and the grant.

4 Q. Since you are not a professional engineer, did you
5 approach anybody for assistance?

6 A. Yes, we are able to ask some of the companies that
7 developed vehicles to help us to come out with the
8 necessary engineering components to build the vehicle.
9 In fact, the vehicle is being built and I'm very glad to
10 say that the Singapore Civil Defendant Force, through
11 many heart and toil, has -- we spoke to the former
12 former commissioner, Mr James Tan, and he was able to
13 help us to realise this vehicle, and we built
14 a prototype for him, and then he was very happy with his
15 performance --

16 MS GAN: Dr Mak, that is fine. All of this is post your
17 filing of the patent, is it not?

18 A. Yes, it was.

19 Q. So I'm just trying to ask you questions in relation to
20 the conception of the invention. So it will really help
21 if you can just address the court. It is a very simple
22 question as to how you conceived the patent?

23 A. As I mentioned --

24 Q. In particular, the movable sides, the movable panels?

25 A. I do not quite understand your question then, sir.

1 11:17 Q. When you approached the engineer, how did you describe
2 to the engineer what you wanted?

3 A. We wanted the panels from the side, and probably from
4 the back, better from the back as well, but in
5 particular from both sides of the vehicle to be opened
6 rapidly so that they can provide shelter for the beds,
7 and for the casualties, and for the rescuers, and for
8 the medics, and the healthcare providers to treat and
9 manage the injured.

10 So we asked them, as you can see from the patent
11 illustration, that it opened outward and extended so it
12 can cover a greater area to receive and treat the
13 injured.

14 Q. So there was no discussion as to how it is going to be
15 powered, correct?

16 A. Exactly how it is powered and how it is done, I think
17 a lot of the work went with discussion with the
18 engineers, and they come up with some of the ways in
19 which we are to do it.

20 Q. I'm going to refer to you the first volume of the agreed
21 bundle at page 403.

22 This is an article about the use of shelters, the
23 British army has used. 403, it is on the right side.
24 It is paginated. So from 403 to 424 you can just flip
25 it through. Essentially, it is an article about the use

1 11:19 of shelters the British army has used since World War
2 II.

3 It also describes vehicles with shelters that can be
4 set up alongside the vehicles, such as those featured
5 at, for instance, page 406. You see it? In the middle,
6 you see what is equivalent of a 3-tonne truck, and a
7 tentage, as well as page 411.

8 Do you agree that, in concept, what you have
9 designed looks something very similar to a vehicle, the
10 third picture from the top at page 411?

11 A. On the surface, it looks similar, but if you notice the
12 tents actually are built outside the vehicle, and the
13 side panel of the vehicle did not open up to cover the
14 area but an extra appendage is added to the vehicle. It
15 is different.

16 Q. But do you agree the Armed Forces have used these kind
17 of shelters that are designed to be part of a vehicle
18 for a long time? Agree or disagree?

19 A. I disagree, because it is a different kind of shelter.
20 With ours, it is the panel from the side of the vehicle
21 that opens out, and this is an added appendage to
22 a stationary vehicle, so because of this I say they are
23 different.

24 Q. Have you come across information about similar vehicles,
25 as what I have shown you here, before your application

1 11:21 date of 27 December 2002?

2 A. I have not come across a vehicle that is able to provide
3 emergency first aid post that opens up the same we as we
4 have said so in our patent.

5 Q. Not even when you were doing your research for the
6 invention?

7 A. That's correct, not for a first aid post that is able to
8 be a compartment, a vehicle, and the one that opens up
9 and have a medical supplies and treatment.

10 Q. If you can turn to page 84 of the agreed bundle, this is
11 a vehicle that has been featured in the army. You agree
12 that the movable panel here, on the left, that has been
13 deployed is affixed to the compartment?

14 A. Yes, that's correct.

15 Q. So have you come across similar vehicles in the course
16 of your research?

17 A. As I mentioned, I have not come across a vehicle that is
18 opened up in this way to be used as a first aid post.

19 Q. This vehicle was available prior even to 2000. So you
20 have not come across any pictures, or physical
21 specimens, in the course of your military service?

22 A. No, what I said is that, you asked me whether is there
23 a vehicle that has come across in a shape, yes, but
24 a vehicle that opens up for medical first aid posts, no.

25 Q. So you are making a distinction that your invention is

1 11:23 in relation to medical vehicles, whereas this is for
2 some other purpose?

3 A. I think, sir, if I may. This is what exactly our patent
4 says. The patent says that this is a first aid post.
5 It is very clear in the first statement of the patent.

6 Q. Okay. If you can look at some of the photographs
7 featured from pages 83, 84, all the way to 101, again
8 you see various vehicles being deployed with a movable
9 side panel. Do you agree?

10 A. Yes, there are movable side panels.

11 Q. In fact even at page 96 you will be able to see
12 a compartment opened up and that is for medical purpose,
13 agree?

14 A. I'm not sure what this compartment is used for, but
15 first it is a compartment opening into another
16 compartment. There is no indication that it is used for
17 medical -- it may be used for an office. Because I do
18 not see any access to patient or patient care in this
19 vehicle that you have shown here.

20 Q. So even though it has a medical cross deployed there,
21 you are suggested that it is not for medical use?

22 A. It may be a HQ element, in which it may be used for
23 administrative purposes. We have HQ tents too that put
24 the crosses in our HQ, when we deploy a combat support
25 hospital or the medical company.

1 11:25 Q. Look at page 95, immediately to the left and in front of
2 the compartment, do you see that there is an umbrella
3 opened up that says "mobile hospital"? So my point is
4 there are such compartments being used, for medical
5 purposes.

6 A. I am not sure. But in this picture the mobile hospital,
7 which is an umbrella, and also the vehicle that is --
8 there is no medical supply in this vehicle, and whether
9 it is truly a first aid post, or is it something else.

10 Q. Look at for instance page 89, this is a photo of what is
11 equivalent to a food van, and I have certainly seen many
12 of these vans prior to your filing date of
13 27 December 2002. So my question is: have you seen
14 these vans before the filing date?

15 A. There are many types of vans, and they have opened up
16 differently, but the van that we are patenting for is
17 the mobile first aid post, which is opened up for the
18 provision of emergency medical treatment.

19 Q. I understand, Dr Mok, but my question is: have you seen
20 these vans before 2002?

21 A. Yes, I have seen vans like this before, but not exactly
22 this one.

23 Q. Thank you. So can you explain to the court how your
24 invention for the MMV is different from such vans?

25 A. Yes, if I may, the invention that we have is a very

1 11:27 dedicated vehicle which is used for emergency --
2 provision of emergency medical treatment, and not for
3 selling hot dogs or doing other purposes as stated
4 clearly.

5 It is a mobile vehicle that opens from the side, and
6 it can open on one side or both sides, and the sides can
7 be extended to cover a greater area so that it is able
8 to shelter the injured, the casualties, the healthcare
9 providers, from the elements of rain and sun. And also
10 provision of medical services, such as oxygen, medical
11 care and suction devices, which is needed to remove
12 substances from the throat, and very importantly water
13 to clean out the wounds of casualties, which we found it
14 very lacking in the previous first aid post that we had.

15 So it is quite different in what is being posted in
16 the pictures here.

17 Q. Thank you. In relation to these vehicles, these food
18 vans, for instance, I'll use loosely the food vans, they
19 also provide shelter. Some of them also provide water.
20 But from your answer to the court, it seems to me that
21 the key difference is the provision of medical utilities
22 or services, as you call it, correct?

23 A. Yes, the difference is that it's a vehicle that provides
24 emergency first aid treatment with the various
25 components of medical treatment. So that is the key

1 11:28 difference in these vehicles.

2 Q. You agree that, for instance looking at page 89, there
3 is space for medical equipment to be stored, agree?

4 A. Yes, in fact, any vehicle can store medical equipment.

5 Q. So it is really the utilities, the medical utilities,
6 that sets your invention apart from these vehicles?

7 A. Yes, I think this is what the patent offices from the
8 various parts of the world, including Singapore, see
9 this as an unique point in terms of being able to patent
10 this vehicle.

11 Q. What are the medical utilities, can you explain to the
12 court what is the difference?

13 A. The difference from a vehicle that sells -- I don't know
14 what they sell, maybe food, is quite different in terms
15 of providing medical care. First, we have to provide
16 a place whereby it is safe to -- for the casualty or the
17 injured to be treated. So we have provided hard board
18 beds so the casualties can be put on that.

19 We have provided medical supplies. The medical
20 supplies include emergency drips, water supplies, so
21 patients who are dehydrated can be rehydrated, bandages
22 for those who may require wounds to be bandaged,
23 clean -- water to be cleaned and bandaged, some
24 medicines, and some emergency operation procedures such
25 as test tubes, whereby tubes can be inserted and air or

1 11:30 fluid can be drained from the chest cavity, if it is
2 needed for patients who have injuries to the chest, and
3 tracheotomy, in which small tubes can be inserted
4 through the windpipe, whereby tubes can be -- air can be
5 blown into the lung if the face, or the nose, or the
6 mouth is blocked, because air cannot enter into the
7 lung.

8 So these are some of the life-saving emergencies, we
9 also have limb-savings, in terms of putting tractions
10 and splints for patients who may have fractures of
11 limbs, and so on.

12 So, this is quite different from a vehicle that
13 provides food or provides other services.

14 Q. Okay, just taking some of those --

15 COURT: How different is your invention from, say, a fully
16 equipped ambulance, according to your description?

17 A. Yes. A fully equipped ambulance is only able to treat
18 one casualty, because they have only one bed and the
19 equipment is set aside for only one individual. So and
20 when the ambulance comes to treat the patient, the
21 paramedics will leave the ambulance and treat that
22 individual. And it is different, because the ambulance
23 itself is not set as a casualty station, but it is an
24 ambulance to transport a casualty, or the patient, from
25 one point to another, after the casualty had been

1 11:32 stabilised.

2 For example, if, say, the patient has a heart
3 attack, and he is staying in block -- 12th floor so what
4 they've called 995, the ambulance driver will go there,
5 and then the paramedic will go to the upstairs and take
6 the lift, and then give oxygen, and bring the patient
7 down, and then quickly transport to the nearest
8 hospital. That's basically what the ambulance does at
9 the moment.

10 So this one we provide emergency treatment to
11 stabilise patients, because we are looking at a mass
12 casualty situation, whereby there are many people
13 injured and, therefore, they need life-saving treatment
14 immediately. And so this is deployed, and so they are
15 treated and stabilised so that they will not die along
16 the way. For example, if they have they have a blocked
17 airway--

18 COURT: Hang on. Don't run away. So number 1 difference,
19 ambulance can only treat one patient at a time, yours
20 can treat multiple patients. Is that what I hear you
21 saying?

22 A. Yes, that's correct. One, maybe two, depending on how
23 severe the injury is. For example, a cut, that's
24 different from a heart attack patient.

25 COURT: Number, yours can treat a more sophisticated injury,

1 11:33 so to speak.

2 A. That's correct, sir, because it is manned by a doctor as
3 well.

4 COURT:: Okay. Any other differences? Put it down in this
5 kind of point forms. So that a simple mind, like mine,
6 can understand.

7 A. Okay, I'll try. So, yes, one, they can -- the main
8 objective of the ambulance is to ferry the patient to
9 the hospital.

10 COURT: Is that not a question of use? I mean, I can park
11 my ambulance at the war zone and use it as a mobile
12 hospital, if necessary.

13 A. Yes, only one at a time, whereas this is used for
14 several patients, as you say rightly, your Honour.

15 COURT: So it is the number of patients that yours is
16 unique?

17 A. Number of patients, the severity of the injuries.

18 COURT: Yours is more equipped, so to speak?

19 A. Yes.

20 COURT: Is there any other thing that you want to highlight
21 between the ambulance and your invention?

22 A. Not that I can think of now. Thank you.

23 COURT: Go ahead, please.

24 MR LECK: Obligated, your Honour.

25 Apart from the number of patients that your

1 11:34 invention is capable of treating, you mentioned a number
2 of these medical utilities or tubes. So I'm just going
3 to ask you one by one what these are. You mentioned
4 beds. So my question is: are beds part of the claims in
5 your invention?

6 A. No, the beds are not particularly part of the invention,
7 in this patent.

8 Q. You mentioned storage of bandages. Bandages are not
9 part of the invention, right?

10 A. The way the bandages are storaged and compartmentalised,
11 and what we call customised, is written in the
12 invention. For example, in civil disaster, we may know,
13 say, there is a big fire in Jurong. And we know when
14 there is a big fire, the majority of the patients either
15 suffer from airway or smoke injury, in which, because of
16 the smoke or burns. So the compartmentalised form of
17 medical supplies can be used in terms of making it more
18 suitable for a particular set of situations.

19 Q. To assist you, look at volume 1 of the agreed bundle at
20 page 388. It sets out all the claims which really
21 define the scope of protection for your patent. You see
22 at page 388, it starts with claims 1 to 4 and all the
23 way until page 392.

24 Just going on with the questions I asked you just
25 now, I stopped with bandages. Now, the provision of

1 11:37 water, where is that found in your claims?

2 Why don't I assist you, Dr Mak, you look at page 388
3 at claim 1. Under the second paragraph, the second full
4 paragraph starting with the words:

5 "...wherein medical utilities selected from one or
6 more of compressed air, suction, water and oxygen are
7 provided accessible from the downwardly major as far
8 as ..."

9 I presume this is where it is being featured,
10 correct?

11 A. Yes, it is. Thank you.

12 Q. You mentioned oxygen supplies. Presumably it is
13 featured here, correct?

14 A. Yes, it was -- it is. It is written "compress air,
15 suction, water, oxygen".

16 Q. You mentioned life-saving equipment, where is that
17 featured? I can't find it.

18 Just focus on the claims, all right? Pages 388 to
19 392, as that defines your scope of protection.

20 A. That has to with the medical supplies that we talk about
21 earlier, in the earlier part of the -- this document
22 here.

23 Q. I put it to you, Dr Mak, what you have just described,
24 "life-saving equipment", is not featured from claims 1
25 to 24. You can agree or disagree.

1 11:39 A. Yes, I do not find that particular phrase in the claims,
2 as stated from claim 1 to claim 24.

3 Q. Equally limb-saving?

4 A. What we have stated in medical utilities, on page 378,
5 has inferred, in terms of the elements of what the first
6 aid post does, and although it is not explicit, but it
7 has the information of what we do as a person who is
8 able to offer emergency medical treatment to casualties,
9 this modality of treatment.

10 Q. Anything, in relation to one to 24, which describes the
11 number of people that your invention can treat?

12 A. It really depends on the supplies that we provide. So
13 in this case, when we make this vehicle, it was meant to
14 treat about 240 casualties per contact. This is based
15 on what the supplies is already been involved with the
16 previous first aid post, which was used for the
17 Singapore Civil Defence Force.

18 Q. It seems to me, Dr Mak, that what is really quite unique
19 is the medical utilities, and what you have explained to
20 the judge, nothing else. Agree?

21 A. This -- sorry, this patent actually talks about vehicle
22 which is -- which has got compartment, which is able to
23 open, and open on one side, or the other side, or both
24 sides, and able to extend, in terms of the area of
25 coverage, to provide the medical -- for utilities as we

1 11:41 discussed.

2 Q. Okay, if you look again at page 84, this is
3 a maintenance vehicle belonging to the SAF prior to
4 2000. Do you agree with me that if you were to move the
5 maintenance equipment out equally, this vehicle has the
6 compartment to treat patients?

7 A. This compartment does not have the extended area that we
8 talk about. This compartment is quite high in terms of
9 putting up patients, the area of coverage is probably
10 not sufficient to treat multiple patients. Maybe one
11 patient, just like an ambulance, maybe two, one on one
12 side, but it is quite different in terms of what we
13 described in our patent.

14 Q. I'll move on, your Honour.

15 Dr Mak, I will now deal with the issue of the scope
16 of the protection. If you can look at page 366 again,
17 this is your Singapore patent certificate for the mobile
18 first aid post. Are you with me?

19 A. Yes, I am.

20 Q. At page 367, it sets out the "background art". Second
21 heading?

22 A. That's correct.

23 Q. Turn to page 368, from 368 to 371, it describes the
24 "disclosure of invention". Then, at page 372, it is
25 a description of the drawings.

1 11:43 A. Okay, yes.

2 Q. From 372 to 387 is a detailed description of the
3 invention, followed by the claims at pages 388 and 392.
4 Now pausing here again, the claims are the ones that
5 define the scope of your protection, agreed?

6 A. I think this is -- what is --

7 Q. An issue of law?

8 A. -- issue of law, it is not my prerogative, I think.

9 Q. Fine, and then finally the drawings are featured and 393
10 to 402.

11 Being the applicant of at least one patent, you
12 mentioned you have applied for at least two in Singapore
13 alone, would it be fair to say that you are familiar
14 with the construction of such a document?

15 A. I am a person who comes up with the idea and the
16 invention. With regards to the technicalities and the
17 wordings of the document, a lot of these things I have
18 to rely on my patent attorneys.

19 Q. I understand, but you would have certainly come across
20 this, right?

21 A. "Come across" as mean I have read through, yes.

22 Q. Yes. Surely you would have been curious and asked your
23 patent attorney, or your patent agent, where the scope
24 of the protection will lie?

25 A. Yes, but this was many years ago, so exactly what

1 11:45 transpired may not come clearly.

2 Q. Fine.

3 Look at page 372, this sets out the detailed
4 description of the invention. And there are three
5 headings within this detailed invention. The first one
6 is "medical utilities" at page 378. See at the middle
7 of the page there is a heading that says "medical
8 utilities"? Then the second heading is at page 381.
9 Middle of the page it says "extendible overhead coverage
10 panels". Then finally, at page 385, is the third
11 heading, which says "fold-out sideboards".

12 Now, if you look at pages 372 to 378, before the
13 heading of "medical utilities" begin, under the section
14 of "detailed description of the invention". If you look
15 at what has been described there, would it be fair to
16 say that this portion forms the core of your invention?

17 A. Can you say the last part again? I didn't quite catch
18 you.

19 Q. If you look under this section of "detailed description
20 of the protection", starting at the bottom of 372 and
21 you read all the way to 378, that actually sets out the
22 spine of your invention?

23 A. 373 to 387, is that correct?

24 Q. Bottom of 372 --

25 A. To 387?

1 11:47 Q. No, to 378. Page 378, before the "medical utilities"
2 begin.

3 A. Yes.

4 Q. That sets out the spine of your invention?

5 A. I do not understand the phrase "spine of invention".

6 Q. You see, the way I read this section called "detailed
7 description of the invention", the initial section
8 defines the spine. And then there are three components,
9 three aspects, the first is your medical utilities, the
10 second aspect is your extendible overhead coverage
11 panel, and then your third aspect is your fold-out
12 sideboards.

13 A. If that is what you call the base of the invention,
14 whereby other things are added on, in terms of the
15 vehicles it is a vehicle, it is a vehicle that is used
16 for medical utilities. I mean, if that is what you are
17 saying, then I agree with you.

18 Q. Because if you look at the claims, which are featured at
19 388 to 392, you can see that broadly the claims from 1
20 to 24 is divided into three sections. So claims 1 to 9
21 defines the medical utilities aspect of your invention.
22 Claims 10 to 19 defines the extendible overhead coverage
23 panels of your invention, and then finally claims 20 to
24 24 defines the fold-out sideboard aspect of your
25 invention.

1 11:49 A. That's correct.

2 Q. That's correct. So if you look at your claims at
3 page 388, beginning at 388, the commonality in the
4 claims is in fact in the first paragraph of claim No. 1.
5 Starting with the sentence "a mobile first aid post"
6 comprising, all the way to "and position when in said
7 erected condition." So just before the final paragraph
8 of claim 1. Because I see this paragraph repeated again
9 at claim 10, and I see this being repeated at claim 20.

10 A. What was your question?

11 Q. This is the common element of the claims?

12 A. To a person reading it, it appears it is a common
13 element, that's reading it. But I think a lot of this
14 is written in legal language, which is best read by the
15 patent attorney, or the agent.

16 Q. Okay, but why don't you have a look at the first
17 paragraphs of claims 1, 10, and 20. And my question is:
18 is it a word for word reproduction?

19 A. Off the cuff --

20 Q. I have read it, Dr Mak, I can tell you it is identical.

21 A. I mean, if you say that it is identical, then I need the
22 opportunity to read it, but I don't think you want me
23 to --

24 Q. Satisfy yourself. Satisfy yourself, please.

25 A. Yes, from this brief reading it appears to be identical.

1 11:51 Q. Thank you.

2 Now, if you look at the first paragraph, it actually
3 has various elements inside that first paragraph, and
4 I am mindful that there are different interpretations
5 between the defendant's expert, as well as your expert.
6 So this paragraph, again I'm asking, is really the spine
7 of your invention, isn't it? It forms the core of your
8 invention?

9 A. Yes, it does form the core, in terms of saying that it
10 is a first aid post, a mobile first aid point.

11 Q. Thank you. If you look at the second paragraph of claim
12 1, it features medical utilities attached to the
13 downward surface of the side panel, correct?

14 A. Yes, it does.

15 Q. Now, if you just hold this page, hold your finger to the
16 page, and turn to page 396, because I'm just going to
17 ask you to look at the diagrams. You see those items
18 numbered 39, 18, that is what it is describing, isn't
19 it, the medical utilities that are attached to the
20 downward surface?

21 A. Yes, these are some of the equipments, for example,
22 number 19 probably looks like a drip in which is used to
23 hold, so that fluids, as you know, runs from the -- with
24 gravity comes down.

25 Q. If you read the second paragraph of claim 1 on medical

1 11:53 utilities, I would suggest that the medical utilities
2 are confined only to the undersurface of the movable
3 panel, correct?

4 A. It says that it is downward from at least one of the
5 panels, but it says it is just at least, it can be from
6 elsewhere.

7 Q. But one of the panels, there are only two panels to the
8 vehicle?

9 A. There are two panels, and also a back panel.

10 Q. Then claims 2 to 9 are dependent on claim 1, agreed?

11 A. Yes, they are related to claim 1.

12 Q. Now look at page 389, if you read the second paragraph
13 of claim 10, it says:

14 "Wherein an extension panel is movably engaged to
15 each said at least one movable panel to move between
16 a collapsed condition and an expanded condition wherein
17 said extension panel is outwardlying of said at least
18 one panel and said enclosure to define a total said
19 region covered overhead greater than provided by at
20 least one panel alone."

21 Now, this paragraph describes the features of the
22 extendible overhead coverage panels, correct?

23 A. Yes, it does.

24 Q. Then claims 11 to 19 are based on this claim 10?

25 A. They are related to claim 10.

1 11:55 Q. It is not just related, they in fact hinge on claim 10.

2 They are dependent on claim 10, agreed?

3 A. Yes.

4 Q. Then over the page at page 391, claims 20, the second
5 paragraph talks about the fold-out sideboards, beginning
6 with the words:

7 "A seat structure pivotally mounted ..."

8 Agreed?

9 A. Yes.

10 Q. And, equally, claims 21 to 24 are dependent on claim 20,
11 correct?

12 A. Yes.

13 Q. So there are three aspects to this subject patent,
14 correct?

15 A. Yes.

16 Q. So claim 1 to 9 covers the aspect of the medical
17 utilities, correct?

18 A. Yes.

19 Q. Claims 10 to 19 covers the aspects of the extendible
20 overhead coverage panels, correct?

21 A. Yes.

22 Q. Finally, claims 20 to 24 covers the aspect of the
23 fold-out sideboards, agreed?

24 A. Yes.

25 Q. Okay. If I can refer you to the bundle of pleadings, at

1 11:57 page 7, Dr Mak. If you look at paragraph 2, just
2 quickly read it, the second line says:

3 "... the defendants have infringed the patent by the
4 manufacture, purchase, use and/or display of the mobile
5 medical vehicle ... made in accordance with or relating
6 to the invention described in the specification and
7 claimed in claims 10, 13, 14, 15, 16, 17 and 18 of [the
8 Singapore patent]."

9 So these are the claims that you are relying on for
10 the litigation proceedings today, correct?

11 A. Yes.

12 Q. So in other words, Mobilestats' asserted claims are
13 pegged to the aspect of the extendible overhead coverage
14 panels, correct?

15 A. For this situation, this case, or I don't know, yes.

16 Q. It is not pegged to the medical utilities which are
17 protected by claims 1 to 9, correct?

18 A. Yes, not according to this case, that is written out
19 here.

20 Q. The fold-out sideboards aspect is not the subject of
21 this claim either, correct?

22 A. Yes, this is not the subject of this current case.

23 Q. Now, more specifically, within the aspect of the
24 extendible overhead coverage panels, the second aspect,
25 Mobilestats is not relying on claims 11, 12 and 19,

1 11:59 correct?

2 A. I think the claims here is written as 10, 13, 14, 16,
3 17, 18, and that is what is written there.

4 Q. So if you look at claim 11, for instance, it talks about
5 how the extension panel has to overlies the movable
6 panel. First of all, you are not making a claim for
7 that, but my question is you are not claiming for that
8 because SAF's BCS, the battalion casualty stations, does
9 not contain this feature, correct?

10 A. I think it is based on my lawyers. So I depend on them,
11 and the expert witness, in terms of what is related to
12 the claims in the patent.

13 Q. Fair enough. Dr Mak, are you familiar with the person
14 "persons skilled in the art"?

15 A. Not -- I'm not a trained lawyer, so this is a law term,
16 I believe, so I'm not exactly clear in terms of the term
17 "persons skilled in the art".

18 Q. That's fair enough, Dr Mak, I'm a trained lawyer and
19 sometimes it eludes me.

20 Now if you look at the second volume of the
21 plaintiff's bundle of authorities. Why don't I just
22 read this out to you? It says, "the notional person."
23 This is an authority that is relied on by your own
24 counsel. At tab 2, page 347. The second tab on the
25 right. Page 347 you see at the right corner,

1 12:02 paragraph 28, the second paragraph, it defines judicial
2 commentary on what is the notional person skilled in the
3 art. And it says:

4 "[This] notional person is deemed to possess the
5 common general knowledge of the subject matter in
6 question. It is through the eyes of the skilled
7 addressee that the patent will fall to be interpreted.
8 And it is by the standards of this person that the
9 question of inventive step is to be judged when this
10 topic is addressed in the counterclaim.

11 A patent is addressed to persons who are likely to
12 have a practical interest in its subject matter
13 [presumably that would be you] or to act on the
14 directions given in it for it to be put into practice.
15 The addressee is deemed to be unimaginative and
16 uninventive but is equipped nevertheless with
17 a reasonable degree of intelligence and with a wish to
18 make the directions to the patent work."

19 My question: do you consider yourself this notional
20 person skilled in the art?

21 A. I hope. I'm a doctor, and skilled in the art of
22 treating patients.

23 Q. So the answer is "no"?

24 A. Skilled in the art of getting a vehicle that is able to
25 provide emergency first aid posts, yes, I hope that

1 12:03 I will be able to do that, and that's what I intended to
2 do.

3 Q. So you actually worked with the technician, with
4 a Mechanical Engineering degree, to design your
5 invention, correct?

6 A. Yes, we worked with some engineers to help to design the
7 vehicle.

8 Q. And that person presumably also assisted you in
9 preparing this application for your patent registration,
10 correct?

11 A. I think the precise way in which the -- how this patent
12 application was made was between the patent lawyer,
13 which is unfortunately a previous group of lawyers, and
14 it was draft like more than 10 years ago. So I'm not
15 sure whether there was exact discussion with those group
16 of lawyers and patent -- there was a patent agent, there
17 was a patent lawyer, and the engineers, as well.

18 Q. So the engineer was present with you when you met with
19 the patent agent?

20 A. An engineer was present, a mechanical engineer was
21 present with us, when we met with the patent lawyers.

22 Q. Who is this person?

23 A. The patent -- the person who helped us to draw these
24 pictures, and helped to us design is Associate
25 Professor Yeo, Tony Yeo.

1 12:05 Q. Is he an employee of the company Mobilestats?

2 A. He is an Associate Professor who teaches, or lectures,
3 in Nanyang Technological University.

4 Q. But he is not an employee of the plaintiff?

5 A. No, he is a full-time lecturer of the university.

6 Q. What were your instructions to him?

7 A. We spoke to him regarding the invention, and since he is
8 an engineer, he helps us to come up with some of the
9 engineering aspects of the design of the first aid post.

10 Q. But did he contribute to your invention?

11 A. In what way do you mean by "contribute"? We asked him,
12 and he said that, okay, these are the things you can do.
13 And so we think about it, and then that's how we come
14 and then we discuss with the patent agent and the patent
15 lawyers.

16 Q. Specifically on the extendible overhead coverage panel?

17 A. I think they are so long ago, so I cannot really recall
18 the exact details, how much he actually contributed to
19 the design and so on. Because it is like more than
20 10 years ago.

21 Q. So in relation to some of the terminology that you used
22 in the claims, such as "hinge" or telescope", I'm just
23 curious, I mean, who thought of those? Was it you, or
24 was it Dr Tony Yeo?

25 A. It was certainly not me, because I was not an engineer.

1 12:07 So exactly whether it was a patent agent, who may be
2 trained -- exactly who came without this precise
3 terminology I cannot recall.

4 Q. But somebody must have told him that the extension panel
5 should be hinged, or telescope?

6 A. We give the general instructions, but you are asking me
7 precisely how the thing is performed, and who thought of
8 that, and who wrote that statement, I cannot really
9 recall, I'm sorry.

10 Q. I'm just curious, if Dr Yeo, in fact, suggested the
11 telescopic invention, shouldn't be he a co-inventor?

12 A. As I mentioned, I can't recall exactly. It is more than
13 10 years ago. We came up with the idea in 2001, it is
14 2013, it is more than 10 years ago, and I can't remember
15 precisely how this exact phrase was put in. I'm sorry.

16 Q. Surely you would be able to remember whether you thought
17 of it, this telescopic feature, for instance, which is
18 in claim 15 --

19 A. I had thought of it, but not in the exact wording,
20 because I'm not trained in that kind of wording. We say
21 that the sides have to be opened up, then extend
22 further, so that it can increase the coverage. So
23 that's what we told them. If we want to use the word
24 "telescopic", which to me sounds technical word for it,
25 then they way have put in the appropriate words for the

1 12:08 terms.

2 For example, certain documents -- I'm sorry, but
3 when we draft, do things, and then we always ask the
4 lawyers, "Can you please draft for us"? So certain of
5 the technical words that are used for this thing may be
6 beyond by ability. But we did tell them that this is
7 what we wanted, to open up, to extend it, to increase
8 the coverage, so that we can treat our patients.

9 Q. Dr Mak, when I read the patent, in relation to the
10 extension panel, it seems to me that there are only two
11 ways that the extension panel can be extended. The
12 first way is through a hinge method. The second way is
13 through a telescopic method, or sliding method, you
14 know, which ever -- sliding telescopic method.

15 So as these are some of the elements that
16 Mobilestats is seeking patent protection on, I want to
17 know who actually thought of it.

18 A. We are together as a team, Dr Ting and I. We told them
19 that we needed the vehicle to open up so that it can
20 cover a greater area, to slide open, or to leave it
21 open. Because you need a hinge to open the side, you
22 cannot just leave it open, so a hinge is somewhat
23 needed. And to slide it open, then we can cover
24 a greater area of protection. We also thought of things
25 that comes down from the side, because there may be

1 12:10 wind, there may be other things that are involved. So
2 that's how we come, but precise wording, and so on, this
3 I think we have to rely on our patent agents and patent
4 lawyer.

5 Q. It has been mentioned in Dr Ting's affidavit of
6 evidence-in-chief that the object of the invention is to
7 provide a first aid point in medical emergencies, in
8 particular, disaster and combat situations, which is
9 quick and simple to deploy. You agree with him?

10 A. Yes, I do.

11 Q. Now, if you look at your claims at pages 389, beginning
12 with claim 10, until 390, ending with claim 18, is there
13 anything expressed in the seven asserted claims that
14 suggests that the first aid point is quick to deploy?

15 A. Yes, it does. Because it opens up the vehicle rapidly
16 to provide an environment for the treatment of
17 casualties to take place as soon as possible. So yes,
18 it does.

19 Q. I put it to you, and you can agree or disagree, that
20 there is nothing within the seven claims that spells out
21 speed of deployment.

22 A. There was no exact measurement or speed, and because we
23 already stated in the first part, I don't know what it
24 is called in the document but we call it a preamble,
25 that the current technology, which uses tents and uses

1 12:12 men to deploy the equipment, takes about 20 minutes to
2 deploy.

3 And when we developed this equipment and we tested
4 it in the Singapore Civil Defence Force, it required
5 about two medical orderly to deploy the entire vehicle
6 in about five minutes. So we considered it is
7 a substantial improvement, in terms of the deployment
8 and making the first aid post operable.

9 Q. Is there anything in these seven claims, at pages 389 to
10 390, that suggests that the first aid post will be
11 deployed with fewer personnel?

12 A. These claims refer particularly to the way the sides
13 boards -- sorry, the side panels are opened up. There
14 are other parts of the patent which talks about
15 deploying the first aid post, in terms of using less
16 manpower, and so on, but it is not in particular a claim
17 of our patent. But this is what it helps, the effect,
18 as a practitioner, as a person who sees a patient, we
19 want more of our medics attending to patients, rather
20 than carrying stalls or trying to build tents. That's
21 what we intend to do, so we, therefore, wanted less
22 people to do the structural part of the vehicle, and
23 more people looking after patients.

24 Q. But there is nothing in the seven claims that expressly
25 refers to how the first aid post can be deployed with

1 12:14 fewer personnel, correct?

2 A. It is not explicit, sir, but with a mechanised way of
3 deployment, I suppose we can assume, or presume, that
4 the number of people needed to deploy the vehicle is
5 less, and also because of that, because it is
6 mechanised, so it is more rapid.

7 Q. Dr Mak, there is nothing in the seven asserted claims
8 which suggests that your invention is mechanised?

9 A. Mechanised in the sense that it is opened up
10 mechanically. That's why we need an engineer to do
11 that. Sorry, I may have misused the term "mechanised",
12 but it is certainly not using a man holding tents,
13 carrying it down, putting it on the floor and putting
14 one pole on top of the another. That's what I meant,
15 I'm sorry if --

16 Q. But it is not electrically powered, correct? Mechanised
17 in that sense, electrically, on hydraulically --

18 A. We have both a hydraulic system, and a manual override
19 too in the system. So we can do it manually as well.

20 Q. It is not featured in any of your claims?

21 A. Yes, it is not featured in that sense, yes.

22 Q. Is there anything expressed, in these seven asserted
23 claims, that suggest that the first aid post needs to
24 stand up to repetitive heavy duty use?

25 A. Not in these seven claims.

1 12:16 Q. Is there anything expressed, in these seven claims, that
2 suggests that the post needs to be used by uniform
3 personnel?

4 A. No, it does not suggest that it is used by uniformed
5 personnel. This is so, because from what we understand,
6 if the Civil Defence Force deployed this in a mass
7 casualty situation and in a prolonged setting, the
8 Ministry of Health may take over the post, and they are
9 civilians.

10 Q. Is there anything expressed, in the seven asserted
11 claims, that the first aid post needs to withstand,
12 these are words used by your expert, "loading imposed by
13 the heavier side walls"?

14 A. Not explicitly in the patent.

15 Q. Now, look at page 389, claim 10. I'm just going to
16 quickly read the paragraph beginning with the words
17 "a compartment carried by said vehicle". Do you see
18 that, claim 10, third line?

19 A. Yes, I do.

20 Q. It says:

21 "... a compartment carried by said vehicle, defining
22 a generally box-shaped openable enclosure for housing
23 medical supplies and equipment, said compartment
24 including a fixed structure and at least one rigid
25 movable panel which is movable relative to the said

1 12:18 fixed structure between a condition closing a side of
2 said enclosure (hereinafter 'closed condition') wherein
3 said panel defines at least part of a side wall of said
4 enclosure and an erected condition wherein said at least
5 one panel is in a substantially or near-horizontal
6 condition ..."

7 Pausing there, can you explain to me precisely what
8 "substantially horizontal" means?

9 A. I think this question has been posed in a different
10 manner. In one of the questions in the expert
11 witnesses --

12 Q. I'm just curious, because you are the inventor. What do
13 you think it means?

14 A. It means it is not vertical, it is horizontal. In terms
15 of the opening of the compartment, it opens in
16 a horizontal manner and not in a vertical manner.
17 That's what I think it means.

18 Q. More precisely, what does "substantially horizontal"
19 mean? At what degree does it stop to become
20 substantially horizontal?

21 A. I'm not sure if I'm technically correct, but if I go
22 back to my school days, 45-degrees is the angle which is
23 of neutral, anything less than 45-degrees is horizontal,
24 anything more than 45-degrees tends towards the vertical
25 side. I mean, if you drew a right angle, 45-degrees,

1 12:19 anything less than that tends to be horizontal, anything
2 more than that is vertical. That's what I learned in
3 school many years ago.

4 Q. But 45-degrees is half of the right angle.

5 A. That's precisely half. So you asked me how do you
6 divide so that's how we were taught in school that's how
7 it was divided.

8 Q. Fine. Can you show me within the specification of the
9 subject patent where it says this?

10 A. Says what, sorry?

11 Q. That it is less than 45-degrees of the horizontal?

12 A. Sorry, sir, you asked me for an opinion of what the
13 sentence means, and I gave you an opinion of what the
14 sentence meant. So it is not stated there, because you
15 asked me for an opinion, and I think that "horizontal"
16 means it is towards the horizontal axis, and vertical
17 means to vertical axis. But -- I mean, to be more
18 precise if I can say that in inverted commas, then the
19 line of identity would be 45-degrees, so anything that
20 is closer to the horizontal line to be horizontal,
21 I presume, and anything more than towards the vertical
22 line would be vertical. That's how I understood it,
23 sir.

24 Q. Dr Mak, these claims were prepared so that a mechanical
25 engineer who is familiar with the design of trailer

1 12:21 trucks or compartments that are mounted on vehicles
2 would be able to design with some level of precision
3 what is said here. That is really what the claims are
4 designed for. So my question, engineering depends on
5 precision, do you agree?

6 A. Of course, definitely.

7 Q. You agree that "substantially horizontal", this word, is
8 not defined anywhere in the specifications of the
9 patent?

10 A. But sir, I have admitted to you I'm not an engineer.

11 Q. Just factually, is "substantially horizontal" defined
12 anywhere in the patent?

13 A. No, not that I know of.

14 Q. Now, having shelter is very important in medical
15 emergencies, correct?

16 A. Yes.

17 Q. In fact, providing shelter is the key reason for the
18 panel being in a substantially horizontal position,
19 true?

20 A. Yes.

21 Q. So as the length of the panels are necessarily limited
22 by the height of the vehicle, you would wanted panels to
23 be extended as close to the horizontal as is
24 practicable, so that you provide maximum coverage, do
25 you agree?

1 12:22 A. Yes.

2 Q. If you look at page 375 of agreed bundle, the second
3 full paragraph which begins with "The side panels".

4 Second full paragraph, line 4, it says:

5 "In the open condition the side panel extends from
6 the fixed structure of the compartment approximately
7 horizontally or at a slight angle to and below (or less
8 preferably above) the horizontal."

9 Do you agree with me that must have been what you
10 meant when you used the words "substantially
11 horizontal"?

12 A. Sorry, I missed the reference to the page. Page 374?

13 Q. Page 375. Second full paragraph, the paragraph that
14 begins with:

15 "The side panels extend substantially
16 longitudinally ..."

17 Then line 4:

18 "In the open condition the side panel extends from
19 the fixed structure of the compartment approximately
20 horizontally or at a slight angle to and below (or less
21 preferably above) the horizontal."

22 A. Yes, I read that, thank you.

23 Q. So I'm just getting guidance, since it is not defined in
24 the claims, from other parts of your patent, on what
25 "substantially horizontal" means, and it seems to

1 12:25 suggest here that it must be at a slight angle to, or
2 below, the horizontal, or less preferably above the
3 horizontal. So do you agree?

4 A. Yes, it suggests -- this statement suggests how the
5 panels are being opened.

6 Q. So a skilled person would not have interpreted "at
7 a slight angle" to mean 30 degrees, or 45-degrees, as
8 the case that you mentioned. First of all 45-degrees is
9 half of the vertical. That's not "slight", do you
10 agree?

11 A. I'm not an engineer, as I mentioned, so what is
12 quantitatively slight or significant in that sense I would
13 not be able to answer you.

14 Q. But I'm relying on this passage here to say that
15 a slight angle has to be almost approximately
16 horizontal. Do you agree?

17 A. It states here that the open condition extends:

18 "... from the fixed structure of the compartment
19 approximately horizontal or a slight angle to and below
20 the horizontal ..."

21 That's what is written here. The question is: what
22 is "slight"? That's what you are asking me. So I would
23 not be able to give you an opinion on what the word
24 "slight" means. It may be less than 30-degrees, but
25 certainly not 45-degrees.

1 12:26 Q. Angles over 19-degrees would not be "substantially
2 horizontal", would you agree?

3 A. I have no idea, I'm sorry.

4 Q. I put it to you that an angle beyond 19-degrees of the
5 horizontal would not be "substantially horizontal"?

6 A. I have no idea. As I mentioned, I am not trained in
7 terms of defining "slight", or "major", or "substantial"
8 in the engineering terms. I think I leave this best to
9 the engineers who are more familiar with mechanical
10 engineering in dealing with these specific details.

11 MR LECK: Your Honour, I only have a series of put questions
12 to put to the witness.

13 Dr Mak, just to be complete, I have a series of put
14 questions to put to you. All you need to do is agree or
15 disagree.

16 I put it to that you taking into account the state
17 of the art as at 27 December 2002, your patent for the
18 first aid mobile post was not novel.

19 A. No, the first aid post is novel and therefore it is
20 patented in Singapore and other parts of the world.

21 Q. I put it to you that taking into account the state of
22 the art as at 27 December 2002 claims 10 and 13 to 18 of
23 the subject patent were not novel?

24 A. No, again I say this because the patent has been
25 awarded, has been examined, have ordered -- examined for

1 12:28 more than three years in Singapore and awarded in many
2 countries and in Singapore, so the answer --

3 Q. I just need you to agree or disagree. It is for
4 formality purposes.

5 I put it to you that the features which the
6 plaintiff say makes the subject patent appropriate for
7 use in medical emergencies, such as: disaster and combat
8 situations, quick to deploy, subject to repetitive use,
9 they are not found in the asserted claims, agree or
10 disagree?

11 A. Sorry, a bit complicated. Can you repeat?

12 Q. I'll break it down.

13 A. Thanks.

14 Q. I put it to you that the feature that it be quick and
15 simple to deploy cannot be found in the claims 10 and 13
16 to 18, agree?

17 A. It is not explicitly saying so, but it implied that it
18 is quick to deploy, yes.

19 Q. I put it to you that the subject patent -- that the
20 feature of the invention being capable of repetitive
21 use -- sorry, repetitive heavy duty use is not expressed
22 anywhere in claims 10 and 13 to 18?

23 A. Not explicitly stressed in the claims, but the vehicle
24 definitely can be used repeatedly.

25 Q. I put it to that you without these features that you

1 12:30 mentioned, there is nothing novel about the asserted
2 claims?

3 A. No.

4 Q. You disagree?

5 A. I disagree with your statement.

6 Q. I put it to that you without these features there is
7 nothing inventive about the asserted seven claims?

8 A. No, I find it inventive. I don't know how to -- because
9 the way you phrased it, so I answer, the answer is,
10 "Yes, I find it inventive".

11 Q. I put it to you that the features you claim to be
12 inventive, which is the medical utilities, are not the
13 subject matter of this infringement claim?

14 A. Yes, based on the claims it is from claims 10 and so on,
15 that is what was claimed for.

16 Q. I put it to you that with respect to the asserted
17 claims, it is obvious to provide an extension panel to
18 increase the amount of coverage?

19 A. It is not obvious to the operator. As you can see from
20 those things that you brought up, people just put
21 appendages outside, or just put something outside, so it
22 was not obvious, definitely.

23 Q. I put it to you that the vehicles and shelters which
24 I displayed to you earlier, the photographs that were
25 displayed to you earlier, constituted common general

1 12:32 knowledge of the skilled person as at 27 December 2002?

2 A. Sorry, I cannot understand the question, because there
3 are two components to it, first is that --

4 Q. Look at page --

5 A. No, first is the definition of the skilled person which
6 we had a problem understanding, and you agreed with that
7 too.

8 Q. Look at page 83. I put it to you that these vehicles
9 were in the general knowledge as at 27 December 2002?

10 A. I'm not sure where this -- these exactly, these vehicles
11 come from and when were they taken, so I cannot answer
12 the question.

13 Q. Look at page 84. I've told that this one is taken from
14 SAF prior to 2000. So I put it to you that such
15 a vehicle existed before 2000 --

16 A. Yes, for page 84, if you tell me that this picture
17 existed before 2004, then the answer is yes. For this
18 picture.

19 Q. Before 2002.

20 A. Before 2002 for this picture.

21 MS GAN: Thank you, Dr Mak.

22 Your Honour, I have no further questions.

23 Re-examination by MS GAN

24 MS GAN: Dr Mak, earlier when my learned friend asked you
25 a question about the subject patent and you mentioned

1 12:34 the former former SCDF commissioner Mr James Tan and you
2 were saying that Mr James Tan was very happy with
3 something, then my learned friend said to you he did not
4 need to know about that. Can I ask you to come back to
5 that thought. You were telling us that the former
6 former commissioner Mr James Tan was very happy with
7 what?

8 A. I think, thank you very much for the question. This
9 commissioner James Tan is a very innovative person, and
10 he was very happy we have come out with this innovation,
11 as documented in the Straits Times report dated in
12 9 July 2004, that he was very happy in our innovation in
13 terms of helping the Singapore civil defence, in terms
14 of helping the medical services for the civil defence to
15 come up with the mass casualty vehicle. In fact, he was
16 so happy with it that for various foreign dignitaries
17 that come to Singapore to visit the force he would show
18 them this vehicle. It was displayed to the then deputy
19 Prime Minister Mr Wong Kan Seng, and home affairs
20 minister, in which Dr Ting and I presented the vehicle
21 to him, and he was -- the minister himself was also very
22 happy with this innovation.

23 Q. You were also referred by my learned friend to
24 a photograph at 1AB89. Can you turn to volume 1 of the
25 agreed bundle, and it is page 89.

1 12:35 A. Yes.

2 Q. You were asked whether one could store medical equipment
3 inside the vehicle that is shown at 1AB89. Do you
4 recall being asked that, Dr Mak?

5 A. I do.

6 Q. I think -- I think my learned friend asked you, "Look,
7 there is space inside to store", and your answer was,
8 "Any vehicle can be used to store". Do you recall that
9 exchange?

10 A. Yes, I did.

11 Q. When my learned friend said to you "there is space to
12 store", how much space did you understand him to be
13 meaning?

14 A. Any amount of space can be used to store medical
15 supplies in that sense. That's how I understood it.
16 For example you can even put some medical stores in the
17 boot of your car.

18 Q. More specifically, in the subject invention, what kind
19 of space are we talking about?

20 A. We are talking about different types of space, we are
21 talking about space that is needed to treat a mass
22 casualty situation, in particular we are talking about
23 more than 200 casualties, so --

24 Q. No, Dr Mak, in fairness to my learned friend the
25 question was "space to store", so you need to confine

1 12:37 your answer to that.

2 A. This vehicle does not appear to have space to store that
3 amount of equipment and the supplies we needed to treat
4 the number of patients that we are to treat.

5 Q. Earlier you were also asked -- or rather you mentioned
6 a gentleman and Associate Professor Tony Yeo from the
7 NTU School of Mechanical Engineering. Can I ask you to
8 explain again what the inventors, meaning yourself and
9 Dr Ting, what use did you all make of Prof Tony Yeo, if
10 I can put it that way?

11 A. We asked him to understand the concept of a vehicle, and
12 how a vehicle, whether it is possible for the panels to
13 open and have -- how can it be opened, so we just learn
14 from him in terms of things in general.

15 Q. When you say you "learn from him things in general", can
16 you explain that a little bit?

17 A. That means we were thinking of designing the vehicle,
18 the first aid post, so we asked in terms of whether for
19 a vehicle, to mount it on the vehicle, to open the
20 vehicle, it is technically -- is it doable sort of work.

21 MS GAN: I have nothing further for the witness, unless your
22 Honour has any questions for him?

23 COURT: Thank you.

24 MS GAN: May the witness be released, sir?

25 COURT: Yes.

1 12:39 (The witness was released)

2 COURT: Shall we resume after lunch?

3 MS GAN: Yes, your Honour.

4 COURT: Say 2.15 pm.

5 (12.40 pm)

6 (The luncheon adjournment)

7 (2.20 pm)

8 MS GAN: May it please you, sir.

9 Plaintiff calls PW2, Dr Ting Choon Meng.

10 DR TIN CHOON MENG (affirmed)

11 COURT: Sit down please.

12 Examination-in-chief by MS GAN

13 MS GAN: Your name is Ting Choon Meng and your address is 81

14 Cavenagh Road, #B1-11 Cavenagh Lodge, Singapore 229626?

15 A. Yes, that's correct.

16 Q. If you look at the document called affidavit of

17 evidence-in-chief that's before you, Dr Ting, would you

18 turn to the page 28, is that your signature on the

19 document?

20 A. The page again?

21 Q. Page 28, is that your signature?

22 A. Yes, it is.

23 Q. I understand, Dr Ting, that you have some typographical

24 errors to correct at paragraphs 16 and 17 of your AEIC?

25 A. Yes.

1 14:22 Q. Would you tell us what those are, please?

2 A. It is on the number of the claims.

3 Q. Mm-hmm?

4 A. Yes. There are two typo errors on the number of the
5 claims.

6 Q. That would be in the second last line of paragraph 16,
7 is that correct?

8 A. Yes, where you can see that the impending claim 10 and
9 24, and the dependent claim 11-29. That would be
10 incorrect, because it is already covered in 11-29.

11 Q. First of all, you need to slow down, and second of all,
12 can you tell us instead of 11-29 what it should be?

13 A. The claims that are incorrect would be from 11-20 --
14 I had made notes in my previous record, it is not inside
15 here. Would you be able to --

16 Q. Dr Ting, if that's the case, then I'm afraid we cannot
17 make these corrections. At paragraph 17, are you able
18 to remember what the errors were? If you are not, then
19 we will move on.

20 A. In the last line, where you have claims 1-9 then claims
21 10-19, and then he again claims 10-24, now, the 10-24
22 would have covered in 10-19, so it would have started
23 from 11-24.

24 Q. So you are saying that at paragraph 17, instead of 10-24
25 it should be?

1 14:24 A. 11-24.

2 Q. Apart from these corrections, Dr Ting, do you confirm
3 that that affidavit contains the evidence you wish to
4 give and the contents are true?

5 A. Yes, I confirm.

6 MS GAN: I offer the witness for cross-examination.

7 COURT: I'm sorry, I'm totally lost by your so-called
8 corrections. Paragraph 17, you said it should read as?
9 Just tell us how the sentence ought to read.

10 A. It would be characterised by claim 1-9, 10-19 -- sorry,
11 10-19, then 20-24.

12 COURT: 20-24, right? I thought you said 11.

13 A. I'm sorry.

14 COURT: That's all.

15 MS GAN: Your Honour, I apologise to my learned friend,
16 I forgot one more small housekeeping matter. If your
17 Honour would look at tab 24, does your Honour have that?
18 The page number is 661.

19 COURT: Yes.

20 MS GAN: Your Honour will see a rather unclear copy of
21 a letter. I had problems reading that myself. I have
22 produced what I hope is a marginally clearer copy, if
23 I could just hand it up now for ease of reference.

24 MR LECK: Your Honour, if we can assist the court, as the
25 document actually stems from Syntech, the supplier

1 14:25 company, we have better copies here.

2 MS GAN: Grateful to my learned friend. That's indeed much
3 clearer.

4 MR LECK: Obligated, your Honour.

5 Cross-examination by MR LECK

6 MR LECK: Dr Ting, I will be referring, primarily, to your
7 affidavit of evidence-in-chief and the agreed bundles,
8 which will be placed before you.

9 You are a medical doctor by training, correct?

10 A. Yes, I am.

11 Q. You are qualified as a MBBS, Bachelor of Medicine,
12 Bachelor of Science, correct?

13 A. Yes, correct.

14 Q. Do you have additional academic qualifications, apart
15 from this?

16 A. No, I don't have.

17 Q. So you are not qualified as an engineer?

18 A. I'm not qualified in terms of getting a degree, but I'm
19 actually appointed as an Adjunct Professor of
20 Engineering in the Nanyang College of Engineering, so
21 I'm actually a professor in the school of Engineering in
22 NTU.

23 Q. What do you teach?

24 A. Bio-medical Engineering, and Life Science.

25 Q. Would it be fair to say that you will not are familiar

1 14:27 with Mechanical Engineering?

2 A. I'm from the school of Mechanical Engineering.

3 Mechanical engineering pertaining to Life Science is my
4 specialty.

5 Q. You are still in practice as a medical doctor, correct?

6 A. Yes, I do.

7 Q. I understand from some Internet publications that you
8 spend half of your time in medical practice, and the
9 other half spent on research to develop new inventions.
10 Is that correct?

11 A. I spend my morning seeing patients. So the morning is
12 for patients, the afternoon and the rest of the day,
13 I actually spend in doing research, mainly in medical,
14 bio-medical research.

15 Q. In Singapore alone, you were the applicant jointly or
16 solely of about 22 patents, correct?

17 A. Thereabouts.

18 Q. Including the subject patent, you have more than 80
19 patents worldwide to your name, correct?

20 A. That has been granted, yes.

21 Q. I also did an ACRA people profile search with your name.
22 You are presently a director of 13 companies in
23 Singapore, correct?

24 A. Yes, I am.

25 Q. Of which you are shareholder of seven of those

1 14:28 companies?

2 A. Yes, correct.

3 Q. So Healthstats International Pte Ltd is one of them?

4 A. Is one of the companies I founded.

5 Q. Another one of the companies, of course, is the

6 plaintiff company, Mobilestats, correct?

7 A. Yes, it is one of them.

8 Q. Yet another company is a media company, 5C Films

9 Pte Ltd, correct?

10 A. Correct.

11 Q. I'm just curious. Was this company responsible for
12 producing the Youtube film snippet on the SWIFT vehicle?

13 A. Completely wrong. The film that was produced by the
14 SWIFT vehicle is actually done by CDF, that is, CDF is
15 the one that actually did it. The Film 5C Company
16 actually we made the film called Singapore Dreaming,
17 together with my fellow classmate Dr Woffles Wu. It is
18 Singapore Dreaming, a film on a completely different
19 thing.

20 Q. Going back a few questions before, when I asked you
21 about the engineering qualifications, can I just ask, do
22 you have any familiarity with heavy engineering
23 principles on vehicular and automotive engineering in
24 particular?

25 A. I do not have specialisation in that area. I only

1 14:30 employee a lot of these principles in regard to rescue,
2 medical and even for a disaster area.

3 Q. When you talk about employing such principles, I mean,
4 can you elaborate? What are these principles?

5 A. Very simple, when we do medical innovation, for example,
6 if we want to -- take a, for example, my pulse invention
7 that I had for your blood pressure. We are trying to
8 get the blood pressure from the wrist. That is the
9 medical side, but for us to do that, we must have
10 a mechanical system to capture the pulse. So we need to
11 calculate and design a mechanical system that collects
12 the pulse, that's mechanical, then we need to convert
13 into electrical, then only the algorithm comes, then
14 only the medical aspect comes. So you can't have a wish
15 list, without the principle to appoint.

16 So if you were to look at vehicle, like that,
17 whether you work on a big one or a small one, your aim
18 was basically to achieve a certain target, so we need to
19 employ certain technical and mechanical principles to
20 achieve when we want to do, to achieve the end.

21 Q. Those principles would they be like your partners? Are
22 the your partners?

23 A. I'm talking about physics principles, mechanical
24 principles, not partners.

25 Q. Oh.

1 14:31 A. So we employee principles, in terms of theories and
2 working of things, to enable us to reach certain result.
3 Of course you need consult, we may be wrong, that is
4 what we thought we can, we design this, and then we talk
5 to certain engineers. And they tell us mechanically it
6 is possible, mechanically it is not possible. And then
7 we will then modify, and that's how we come up with
8 invention.

9 Q. Along with Dr Mak, your co-inventor on the subject
10 patent, you assigned the subject patent to Mobilestats
11 on 8 August 2011, correct?

12 A. That's correct.

13 Q. So you were here earlier this morning, and I asked,
14 that's about one month before the commencement of the
15 legal proceedings. What would your reason be for --

16 A. It is a very basic commercial decision, because when we
17 were dealing with civil defence, it was a one party that
18 we actually waived the usage, and actually licenced it
19 to the vendor. But we realise we were now talking to
20 many parties. Actually, we have quite a number of
21 countries coming to approach us.

22 Then we have to make sure that there is a commercial
23 vehicle, therefore, our negotiation with them have to be
24 from Mobilestats, and we have to assign this. And this
25 company has the potential, and the need, to raise funds,

1 14:33 and even sign deals and, therefore, we need to have
2 a commercial decision so assign this patent. So it is
3 based on a commercial decision.

4 Q. So the ownership of the patents would have been assigned
5 on 8 August, right?

6 A. To Mobilestats.

7 Q. Can you turn to volume 2 of the agreed bundle,
8 page 1256?

9 A. Volume 2?

10 Q. Page 1256. This is a letter from your lawyers.

11 A. Yes, I have it.

12 Q. So this is a letter from your lawyers, at the time, Yu
13 Sarn Audrey & Partners, and it is dated 29 July. So if
14 I just I read paragraph 1, you see that they represent
15 themselves as acting for Mobilestats:

16 "Our client is the owner and current proprietor of
17 Singapore patent".

18 Which is really the subject patent. But my question
19 is you have only assigned the patent on 8 August?

20 A. Yes.

21 Q. So which one is correct?

22 A. Both are correct. Very simple, you see we are both
23 directors and founders of the company. As directors of
24 the company, and the invention coming as a result of
25 a director of a company, the IP will belong to the

1 14:35 company, and the IP, actually, is more of a commercial
2 decision. Already the IP is under our two names, we two
3 also represent Mobilestats, in fact we are the founder
4 of Mobilestats. So when Mobilestats have to act,
5 I think the implicit is that both of us are owners of
6 the IP, and we are also the founders of the company and,
7 therefore, we have asked for such an action, on behalf
8 of Mobilestats.

9 Q. You have other shareholders apart from Dr Mak and
10 yourself, right?

11 A. There are two other what we call sleeping partners.

12 Q. There are more directors other than the two of you as
13 well, to Mobilestats, right?

14 A. The two are not -- they are not directors, they are
15 shareholders, actually. I mean, they do not participate
16 both in the business, nor the invention sign, they are
17 basically investors who invested some money. When we
18 needed to make a prototype for the SDF, we needed some
19 money to make that prototype so we had help from the two
20 investors that came in.

21 Q. Can you look at volume 1 of your agreed bundle at
22 page 431. So you see this is a licence agreement?

23 A. Volume 1.

24 Q. Volume 1 of your agreed bundle, page 431. This is
25 a licence agreement between Mobilestats and a company

1 14:37 named Gee Sheng Machinery & Engineering Pte Ltd.

2 Now, the licence agreement is dated

3 13 February 2006. Do you see it?

4 A. Give me a minute. This is civil defence.

5 COURT: Did you say page 41?

6 MR LECK: 431, your Honour. Sorry. It is a licence

7 agreement, right at the top, it says dated

8 13 February 2006. So this would have preceded the date

9 of the assignment, correct?

10 A. Yes.

11 Q. Under the introduction, you see that the inventors are

12 listed in schedule A, and you, together with Dr Mak, are

13 the inventors, correct?

14 A. Yes.

15 Q. In fact what's happened is that the two of you have

16 licenced the patent rights to Mobilestats, correct?

17 A. Say again?

18 Q. The two of you have licenced your rights to Mobilestats,

19 and then Mobilestats is permitted to licence in turn

20 to Gee Sheng?

21 A. Yes.

22 Q. So I suggest to you, again, that what has been described

23 by your lawyers at page 1256, volume 2 of the agreed

24 bundle, that the owners were Mobilestats as at the date

25 of 29 July, is incorrect.

1 14:38 A. You are incorrect. You see the civil defence was the
2 first group of people who actually we made the thing
3 for. When we invented this, we were actually commanders
4 in civil defence, we were still in our active national
5 service, which is actually the reservists. And civil
6 defence, in fact, was the first target we wanted to
7 because the first aid post that was, actually was, in
8 operation at that time needed a full revamp, which
9 follows by a doctrine change. And when we were working
10 with civil defence, that was the first ever commercial,
11 that we have not even formed a company.

12 So when Mobilestats was -- when the invention was
13 done, it was not like when Dr Mak and myself say, "Look,
14 let's form a company then we go and invent". The
15 invention process, to understand, is that when two
16 person come together, and we started drawing for this,
17 we wanted to target for the use. And when that became
18 a fairly real prototype coming, we then realised how is
19 civil defence going to use us and, therefore,
20 commissioner James Tan said, "You would need to have
21 a company so that you can work with civil defence", but
22 civil defence will lead you to waive for us, but you
23 must get the licensing from the vendors.

24 So every vendor that wants to actually attend
25 our -- submit a tender, must get a licensing agreement.

1 14:40 So actually it is not Gee Sheng, but every vendor who
2 wants to qualify. If we don't even have the licensing
3 agreement, SCDF don't even consider. So it is very
4 unique, and it is not commercial, it is just an event of
5 things that come, that civil defence then wanted this,
6 and, therefore, commercial decision then follows. But
7 we are owners of the patent, and we are rightful owners,
8 we founded the company and, therefore, it is our right
9 when we are going to assign, and we feel that it is
10 important to assign to the company.

11 Q. Dr Ting, the only point I'm making, in relation to your
12 lawyer's letter featured at 2AB volume 2 of the agreed
13 bundle, page 1256, is that as at that date,
14 29 July 2011, Mobilestats was not the legal owner of the
15 patent. You just have to agree or disagree.

16 A. I disagree because it is technicality, which is the same
17 owner.

18 Q. Okay. Your Honour, I am moving on to the next area.

19 Dr Ting, Dr Mak served with you in Singapore Civil
20 Defence Force, correct?

21 A. That's correct.

22 Q. And you heard his testimony this morning. Can you
23 explain to the court your perspective of how you
24 developed, together with Dr Mak, the subject patent?

25 A. In fact, both of us were very shaken by the 9/11. The

1 14:42 reason being Mak was away there, I was actually in our
2 third battalion. Let me explain where Mak is. Mak is
3 actually the Deputy Commander of the 32 Rescue
4 Battalion. I am the Medical Platoon Commander. And
5 what came out from the civil defence, at that time, was
6 that our report was a little bit more detailed. The
7 people who were rescuing the casualty, the rescuers were
8 dieing from the falling debris and from the tents that
9 they set up. So both of us met and felt that there is
10 something we could do, using engineering terms and using
11 medical knowledge, to come up with a completely new
12 novel idea, whereby it fulfills three main things.

13 Let me elaborate these three main things. The first
14 aid post, by the way, is not a common term used in
15 our -- a first aid post, the word is actually used in
16 the civil defence for a special purpose. It is for mass
17 casualty equip -- this management. It fulfills three
18 main things. One, it must have the ability to quickly
19 deploy, two it must be able to triage, which means to
20 sort out, when mass casualty is in front of you, you
21 must be able to sort out the severity of each casualty.
22 Number 2, the whole concept must be able to quickly
23 stabilise and sort them into a light, medium or severe.
24 Then you implement treatment to stabilise and save
25 lives.

1 14:43 So there is a flow. When the two doors are opened
2 up, or the two sides are opened up, one side is actually
3 for light casualty, the other side is for medium and
4 severe. So you can see the flow of this casualty in
5 front being sorted out and, then going in, stabilised.
6 After that, they actually get evacuated at the back,
7 which means ambulance will be in front, or they can
8 carry their patient at the end.

9 So the whole concept is actually -- or the
10 mechanical works that you go into this morning, is
11 actually the way to achieve this whole flow. Whether it
12 opens a certain way or not, is actually determined, and
13 the way we put our things is to ensure these three
14 things: quick deployment, ability for you to reach mass
15 casualty fast, stabilise them, with all these medical
16 equipment that is inside, and then evacuate them. Now,
17 if you can do that, then that was our original concept.

18 So that is when we spent lots of time drawing,
19 studying the number of casualty we could carry, the type
20 of casualty that we would want, and then from there we
21 came out with a certain concept for mass casualty in
22 civilian disaster. And then we look at, of course,
23 other disasters, like military casualties and BCS.

24 After that, we decided to draw it into a working
25 model. So from working model, you can see we need

1 14:45 principles, mechanical principles, electrical principles
2 that come in, to allow us to do certain things. How to
3 so-called deploy open, how to pull this, pull that, put
4 that up. Then with this principle, we, of course,
5 consulted engineers on the ground, and said, "Look, if
6 this is done, what is the load, the weight?" Then we
7 talked to civil defence, we talked to the medical
8 division of the civil defence, "How much do you need to
9 carry?" We talked to division commanders and see, "How
10 much do you carry?"

11 So this whole concept was then developed into
12 a prototype, and the prototype, therefore, is used by
13 civil defence for six months, six months, and they
14 actually deployed up to the causeway for mass casualty,
15 before the commissioner was so satisfied, he made
16 another four more. Another four more, so there is nine
17 at the moment over the last few years.

18 Q. Dr Ting, what you have described in relation to the
19 concept, appears to me to be one of use of the
20 invention. Do you agree?

21 A. Can you repeat that?

22 Q. What you have just described on this concept of the
23 invention, is in relation to use of the invention.

24 A. Totally not. I think you have misunderstood. It is the
25 change of doctrine. Because, let me explain that it is

1 14:47 a change of doctrine.

2 Because of our invention, civil defence actually
3 wrote a new doctrine, and so did the army with a new
4 manual. What do you mean by the change of doctrine?
5 You see, used to be the days. Imagine you have 100
6 casualties that is from an explosion. If we use the
7 usual concept used in Israel and America, it's scope and
8 run. So ambulance that come will scope, take, run.

9 If we mobilised all the ambulances in Singapore,
10 there will only be 60 of them. We will have picked up
11 60 patients, and the other 40 would be coming out with
12 nobody to take. And the other 60, some would die,
13 because they are not stabilised. The airway is blocked,
14 the bleeding is arterial, and eventually they get jammed
15 in a big jam. So that is the concept.

16 What they do then is that they employ, or what we
17 call, first aid posts, and we put 20 men upfront, carry
18 the post and the tent, and we set up the 20-man tent,
19 two 20 man tent is £180, two lorries, and then the
20 stalls come down. So the men are all employing to do
21 that. The casualties, by the way, you can imagine, are
22 lying all over the place while you have them setting up
23 the tent. By the time they be finish, we have the death
24 of the first waive, which is the golden hour.

25 So there is a very big change in the doctrine,

1 14:48 because when the new vehicle comes in now, the first
2 thing is they assign, there is a man one and man 2, who
3 does the triaging. When the triaging is done, which is
4 done in minutes, the whole thing is ready in five
5 minutes, the flow for casualty treatment it goes in. So
6 you spare the men for setting up. The men is used to
7 treat the patient, and then after that, you evacuate.

8 There is a doctrinal change --

9 Q. Dr Ting, let me just stop you there. Perhaps my
10 questions were not clear, and I apologise. Can you just
11 look at the drawings behind your patent, at volume 1 of
12 your agreed bundle at page 393 to 402?

13 A. Volume 1?

14 Q. Agreed bundle. So these drawings manifest your
15 invention. Now, what you described to the court just
16 now was the historical concept as to how you decided to
17 build this vehicle, but it is not the invention to me.
18 So if you were to look at, for instance, figure 1 at
19 page 393, can you explain to me how this idea of, let's
20 say, the movable panel, at number 2, who thought of
21 this? Let's start there.

22 A. Okay. We start there and then -- now, the movable panel
23 in number 2, obviously you can see from there that this
24 is a truck, or rather a vehicle mounted with this.
25 Panel. It is way above what a human person can do. So

1 14:50 there is a system, and there can be a couple of
2 engineering system which you can employ to open up. But
3 the opening up of it is what takes over the function of
4 setting up the tent. That's why speed and manpower is
5 saved here.

6 Q. Again this is concept, you see. To me, it is a concept,
7 but in relation to this invention, who thought of coming
8 up with this opening up of a side panel?

9 A. Both of us thought of it. Both of us felt that the best
10 way to -- there are three that the shelter, or this
11 panel, functioned as. Number 1, it functioned as
12 a shelter, therefore, we need a shelter for operation.
13 And number 2, you need a place where the first aid or
14 those equipment that can be hang is actually put down,
15 and lights are in. Okay? That's number 2.

16 I think number 3 that's important is that there is
17 the ability for you to fit into any kind of a space or
18 terrain. If you have a system that just simply opens at
19 a fixed angle and goes up either or, or this way or that
20 way, then you have no way for you to adjust the space.
21 Therefore, you need not only an opening one, but
22 a moving, a sliding or telescoping one that allows you
23 to fit into the terrain that you are in. If you were to
24 open just like that a none or or, then at a certain
25 place that it is narrow, you would not be able to deploy

1 14:52 all and you are actually stuck. So there is a lot of
2 consideration in the moving of the part.

3 Q. You heard earlier in the course of this morning in the
4 cross-examination of Dr Mak, I had identified to the
5 court that there are really three aspects to your
6 patent. Do you agree?

7 A. The three divisions are for --

8 Q. Just answer. Do you agree that there are three aspects?

9 A. I agree there are three aspects to this, yes.

10 Q. Those three aspects are in relation to the medical
11 utilities, correct? First one?

12 A. (Witness nods).

13 Q. The second aspects is in relation to the overhead
14 extendible coverage panels?

15 A. Yes.

16 Q. And then the final one is on the fold-out sideboards,
17 which is number 9, at figure 1, correct?

18 A. Yes.

19 Q. Now, just focusing on the pivoting movable panel, at
20 number 2, would you agree that this aspect of your
21 invention is quite common place?

22 A. It is definitely not.

23 Q. Okay.

24 A. Yes.

25 Q. Now, can you turn to page 83 of that same bundle. See

1 14:54 this is a pivoting side panel, correct? Then turn to
2 page 84.

3 A. Yes.

4 Q. Again you see there is a pivoting side panel?

5 A. Yes.

6 Q. In fact the one at 84 is prior to the year 2000. So my
7 question is: this pivoting side panel is already
8 available in the public domain?

9 A. If you were to pull out --

10 Q. Agreed? Agree or disagree?

11 A. Agree or?

12 Q. Do you agree that this pivoting side panel, shown at
13 page 84, is already available at --

14 A. Yes, it's already available in the public domain.

15 Q. So do you agree that this pivoting side panel is already
16 available prior to your filing date of the patent?

17 A. Yes, I will on this one.

18 Q. Do you agree that the fold-out sideboard, featured at
19 number 9 -- at page 393, do you see that?

20 A. Mmm.

21 Q. It is also available in common knowledge prior to your
22 filing date, agreed?

23 A. If you take the single panel that -- I think definitely
24 that that's available in the -- yes.

25 Q. Now, if you look at page 97, this is a photograph of the

1 14:55 supplier's container, that would be Syntech. They had
2 actually created this for delivering food to the
3 aeroplane. Now, do you see that it has a telescoping
4 feature?

5 A. You are referring to the base?

6 Q. Page 97.

7 A. Are you refer --

8 Q. I have a larger photo, your Honour, if I can just tender
9 this to the court? (Handed)

10 A. You are referring to the base?

11 Q. Yes, I'm referring to base, as well as to the roof.
12 They both have a telescoping feature.

13 A. This is what I mean by using a principle, a mechanical
14 principle, to achieve your aim. For you to reach
15 a certain height and certain aim, you can do it by
16 elevation, by spring method and by a telescoping method,
17 but the method itself is by which you achieve certain
18 aim.

19 Q. So looking at these pictures from 83 to, let's say,
20 page 97, you agree with me that many of these vehicles
21 have been available prior to the filing date of your
22 patent, agree?

23 A. I don't agree, because if you don't look at it in
24 totality, that it is the ability for you to employ or
25 deploy fast, and we have to use this principle. Then

1 14:57 you just pick up one of it and say, for example, you
2 know there is steam and steam is available all the time,
3 there is an engine and it's available, put the two
4 together and make a steam engine. It does not work that
5 way.

6 You have to have the ability to put the required
7 component at a certain order to a certain function, so
8 that we employ for specifically mass casualty mobile
9 first aid post. So to look at the stall and moving it
10 down, to look at the door and opening it up, it is by
11 itself of course not an invention. It is not what we
12 are claiming, that little one thing. But the whole
13 concept of a mobile first aid post.

14 Q. But you agree that many of these vehicles you would have
15 seen. Now, let's just assume that these vans existed
16 prior to your filing date, can you then tell me, with
17 reference to your invention, the figure of which is at
18 page 293, how your invention is different from the
19 photographs of some of these vehicles that I have shown
20 you?

21 A. First of all, the whole use of those vehicles are
22 completely not for mobile first aid posts. And
23 number 2, there is not requirements for speed. A lot of
24 it is for either sale of hot dogs, whether it is opening
25 up for a news stand, or opening up for a certain

1 14:59 equipment, firemen, but it does not allow you to have
2 a space for working where you can prevent elements from
3 falling, and you also allow day and night. So the
4 functions, in fact, are completely different. Meaning,
5 just because you open a door to the side, it does not
6 equal to, therefore, I have made a very novel way of
7 having a panel that can do this, at the same time allow
8 medical equipment to be hang on, and also allow space to
9 work and also allow flow of patients.

10 So the design of this whole thing is definitely not
11 at all the same from what you are looking at. The panel
12 that you have is something quite -- almost you can even
13 see it in the determination of the tender. Even your
14 own tender, what I mean there, is states that it must be
15 able to do certain of these things. In your tender
16 itself, it states that it is not like why did it state
17 that, because it allows certain function to be done.

18 Also in the same tender, you asked that the vendors
19 must go and get licensing done from us. Get licensing,
20 and this agreement, so they already admitted that you
21 have to make such a panel. And there is an IP out
22 there, and the vendor must get the licensing from
23 Mobilestats before they proceed, very much like civil
24 defence and civil defence have done it.

25 Q. You have mentioned a few elements I have taken note of.

1 15:01 One of which is use, another is speed of deployment, and
2 the third one is space, right?

3 A. Space for operation.

4 Q. So I'm just going to refer you to page 388, where the
5 claims of the patent is set out. It starts with claim
6 1. Since you agreed with me that the plaintiff is only
7 relying on claims 10 and 13 to 18, correct? For the
8 infringement proceedings?

9 A. Yes, the claims are for the infringement.

10 Q. So if you can turn over the page to page 389, right at
11 the bottom is where claim 10 is featured. Can you show
12 me anywhere in claim 10, what you said, the use of which
13 you think is unique to your invention is featured here?

14 A. In fact when you read the whole claim, it gives you the
15 whole concept design urgency. It is not only implies,
16 it's actually a requirement for you to be able to do
17 such in the first aid post. Let me read and then
18 I think we -- is it okay?

19 "A mobile first aid post comprising [of one]

20 A road vehicle ...

21 ... defining a generally ... box [et cetera] and a
22 compartment including a fixed structure and at least one
23 [side] ... movable panel which is movable [to]
24 relative ..."

25 Why do we do that? It is in the claim. It is

1 15:03 because we need to replace the post, we need to replace
2 the tent. So as you go down, you find that the panels
3 need to do certain things, and that is replacing the
4 functions of the first aid post. So such functions are
5 then over-- sort of taken over by the claims to tell you
6 I need to have the whole thing set up, deploy ready.

7 Claim 10 basically tells you that this vehicle must
8 possess all these things for it to function, and
9 function fast. You cannot claim in the patent that
10 I want it within 10 minutes. There is no claim in the
11 patent that can say, "Oh, it must be done for 10
12 minutes". But the function of each of the parts allows
13 you to reach that stage where you can do it fast.

14 Q. So I take it that the element of speed is not featured
15 here, in the asserted claims, correct? It is a very
16 simple question.

17 A. It is to me. The element of speed is implied.

18 Q. But it is not expressed, right?

19 A. It is implied.

20 Q. I'm just going to suggest to you, that your invention
21 appears to me like any one of these food vans with an
22 extendible panel added on to it. Do you agree?

23 A. I totally disagree. If it had been, it would have been
24 done long ago by civil defence.

25 Q. Your Honour, I'm going to jettison some of the questions

1 15:04 I asked earlier today.

2 Dr Ting, given your familiarity with engineering
3 principles, do you consider yourself as the notional
4 person skilled in the art?

5 A. I am only recognised as a doctor, and both as a medical
6 engineering expert in this, medical engineering.

7 Q. So your answer is "no"?

8 A. (No answer).

9 Q. So you, as you mentioned earlier, work with a technician
10 or an engineering consultant?

11 A. We work with engineers.

12 Q. So is that engineering consultant a co-inventor?

13 A. Of course not. It is basically after you have
14 conceptualised an invention, and you allow this
15 movement, you would like someone to check whether this
16 calculation is correct, to check whether my diagram and
17 my drawings are on sound principle. When I open this,
18 does that fall, does that tilt? If I open one side,
19 what can I do to balance the other side? Because the
20 vehicle can open either side and together. So when you
21 plan all this, the calculation part is important. Now,
22 I don't have good calculation, but I have principles,
23 and therefore, you need calculation. It is basically
24 someone who works on your invention to come out and
25 bring the proof. We are both the inventors, and no one

1 15:06 else.

2 Q. Looking at page 393, can you share with us some of what
3 those calculations are?

4 A. The calculations that we refer to is when we make the
5 prototype.

6 Q. But the prototype was made in 2004?

7 A. Yes.

8 Q. Well after your patent was filed.

9 A. The patent had been filed but this patent -- let me
10 explain. This patent is important, because in
11 situations and countries where they require a smaller,
12 for example, Saudi Arabia, they wanted a smaller vehicle
13 and they were treating between 30 to 40. We had the
14 ability for you to shrink it down to half its size. The
15 certain places where it's a huge number, like Jordan,
16 when we were speaking, they wanted our licencing from
17 UN, there were mass casualty, so they were treating 200
18 to 300. Therefore, the size will then vary. This
19 patent covers and it does not limit us to the size of
20 the thing. So when you go into detailed prototype,
21 that's where calculation comes in. Calculation does not
22 come into a patent and you are locked into a number,
23 because our ability for us to expand smaller and bigger
24 becomes important.

25 Q. Dr Ting, you just mentioned earlier that in working out

1 15:08 this patent you had to sit with your engineering
2 consultant --

3 A. Yes.

4 Q. -- to do certain calculations. Now you are telling us
5 that the calculations were done when the prototypes were
6 designed some years later.

7 A. What I'm saying is --

8 Q. Let me finish. So which is it? Did you seek
9 consultation before the filing of your patent, or after?

10 A. Consultation is sought before the filing, for us to have
11 the principles on which we calculate. For example, if
12 I have --

13 Q. Stop there. Then tell us where are the calculations as
14 featured inside the diagram?

15 A. Our calculations are proprietary to us, so we did not
16 file it, but the principle has been there. In terms of
17 calculation formulas, it is not inside here.

18 Q. Dr Ting, in relation to patents, you have to disclose.
19 If it is proprietary, you cannot claim protection as
20 a patent. Do you agree?

21 A. I disagree. The patent, when you file, you need to have
22 what we call enabling disclosure, disclosure enough for
23 you to make. Therefore, if you take this disclosure and
24 you are able to make a bigger or smaller, then this
25 patent works. But the proprietary part of it, in

1 15:10 algorithms and things that we have, it's part of the IP
2 strategy that we keep. They're proprietary.

3 And that's why when they start licensing that time,
4 we will discuss with them how big do you need, then how
5 many do you need, then we calculate together with
6 engineers to design and make that. It depends on the
7 client's need. If he needs a huge truck, double the
8 size of what we are doing, then calculation will be
9 different. So there is a different calculation in terms
10 of the load and the engineering part, and that that is
11 not captured. The concept of how it is done in detail
12 of the operation, and the flow, which implies, is to
13 what is captured.

14 Q. Are you suggesting to the court that these algorithms
15 you referred to are the unique features of this
16 invention?

17 A. No, I'm explaining to you why there are proprietary, and
18 things that are. And why this -- enabling disclosure is
19 important. This disclosure will enable you to reach
20 what you want to do, but if you want to do a smaller one
21 and a bigger one, you would have to then cater to the
22 different needs and calculations.

23 Q. I'm thoroughly confused, because if you were to look at
24 figure 1, the usage of this vehicle, as manifested in
25 the drawing, for medical use is obvious to me. Do you

1 15:11 agree?

2 A. Obvious in what sense?

3 Q. The fact that you were to open up the sides, I already
4 showed you pictures earlier for, let's say, hot dog
5 stands, they are available. So if you decide to use it,
6 instead of a hot dog stand, for medical purposes, to me
7 it is obvious. Do you agree?

8 A. That's where you are mistaken. What looks obvious is
9 not. You see, both sides of the panel actually serve
10 certain different purposes, and the flow of it serves
11 different purposes. So does it mean when you open
12 a panel and put a bed there, it becomes an A and E? The
13 basic whole concept is that this is has become a mobile
14 A and E. When it's deployed, in five minutes, it
15 becomes an A and E.

16 Now, the A and E has certain flow. When you look at
17 the two sides, the left side, and in your same doctrine,
18 it will be the light casualty, the right side is the
19 heavily casualty. There are certain flows of work and,
20 therefore, you can't open up a hot dog stand and put a
21 bed, and say that this also becomes a first aid post.
22 It does not work that way, because you require the panel
23 to do certain things for you.

24 Q. Okay. I'm just going to focus on first of all the
25 element of time. You said one thing that's unique is

1 15:12 that it is fast, it takes five minutes. Did you not say
2 that just now? Five minutes to set up?

3 A. It takes five minutes for our vehicle to set up.

4 Q. Now look at the asserted claims 10, 13 to 18, and tell
5 me where this five minutes to set up is expressed.

6 A. If you were to look at the patent introduction that we
7 have written, and the one in front --

8 Q. I think just tell me is it there or not there.

9 A. It is implicit.

10 Q. So it is not expressed, correct?

11 A. You will not see that word "speed", but it is implicit,
12 because we wanted to do that. You must read this in the
13 front part where we want to solve a problem that is
14 threatening the rescuer. And, therefore, we wanted
15 speed, and that's the reason why we did this. The
16 claims tell you how to make certain things. The purpose
17 for doing certain things has been explained in the first
18 part. So I think if you start tearing each one, and
19 then you will find that you can actually combine three
20 or four ice cream or hot dog stands, and make it into a
21 first aid post, you are mistaken.

22 Q. Okay, the second element you raised was on flow.

23 A. Yes.

24 Q. So you said maybe on the left side it is for --

25 A. In the doctrine.

1 15:14 Q. Yes. And on the right side is for more intensive
2 injuries. So, again this concept of flow, can you tell
3 me where it is expressed in the asserted claims?

4 A. As a result of the patent --

5 Q. "Yes" or "no" first, then you explain.

6 A. Yes, it is implicit inside. Because as expressed in
7 the -- I think the front part that you can see, you will
8 find that -- in fact what happened is that after the
9 vehicle and the patent has been made, the whole doctrine
10 was rewritten. The important thing is to know that the
11 doctrine had to be rewritten for SCDF, and the doctrine
12 has been written for BCS. This doctrine change is to
13 allow the flow of this operation. So before that we had
14 the doctrine which is a restricted document, and this
15 doctrine tells us which one what to do. The whole
16 doctrine has now been changed, because of this.

17 Therefore, it is not only implicit. It is meant to
18 make this change. And if you'll look at your own
19 tender, it also says it must have 10 minutes or less.
20 Your vehicle must be 10 minutes or less. And it is
21 implicit.

22 Q. Let me get this right. The doctrine was only written
23 after 2002, correct?

24 A. The doctrine is written by the civil defence after the
25 prototype has been accepted. And then they go into

1 15:15 operation. So this doctrine basically tells you the
2 operation, plus the fact why it can set up fast, certain
3 flow need to be there.

4 Q. Again, I'm confused. I thought that the doctrine is
5 featured here and that's why --

6 A. You are confused because this patent claim --

7 Q. -- it's unique.

8 A. This is patent claim, this is not doctrine. A patent
9 claim enables us to do certain things. It's called
10 enabling disclosure, whereas as a result of doing that
11 certain thing, the doctrine of rescue changed. That
12 means, previously we were scope and run. Previously, we
13 set up tents. Right now if there is a mass casualty,
14 now, the doctrine for Singapore is that they will deploy
15 the SWIFT. So if we have a few hundred people here, the
16 vehicle will be in front of this, open up and in five
17 minutes, we were sorting out casualty.

18 So that doctrine of operation of not scope and run,
19 but bring the A and E forward. That doctrine has
20 changed. That is in fact the most important
21 significance, now speed is beside the -- on top of that
22 the flow. So if you are looking for that word in the
23 claim and not look at the totality, you are looking at
24 the tree and not the forest.

25 Q. Dr Ting, is there anything in the asserted claims that

1 15:17 suggests that the first aid post needs to be deployed
2 with minimal personnel?

3 A. The first aid post is designed to be deployed
4 efficiently, taking away the personnel from setting.
5 That's why, if you had 20 men setting a pole, now I have
6 two sides opening, I spare up to 12 men who are going to
7 do the treatment. That's the important point.

8 If we are still having 20 men pulling up the side,
9 it does not solve the problem. So by moving the side up
10 and putting it out, I save 12 men. So you set up with
11 the minimal men to set up. This is, actually again,
12 described very detailed in the first few pages, in front
13 of the patent.

14 Q. But it is not in the claim? "Yes" or "no". Is it
15 featured in the claim?

16 A. It is not in my claim that is written.

17 Q. Dr Ting, I'm asking these questions because these points
18 were raised by your expert. So I'm asking another one
19 where your expert suggested that the claims suggest that
20 your invention must be able to stand up to heavy
21 repetitive use. So my question, since you are the
22 inventor, is it featured anywhere in the claims?

23 A. It is obviously featured. Let me show you the panel.

24 When we describe the previous thing, the previous
25 first aid post, it was using tents and poles. How much

1 15:18 prevention can you get? Right now we are having solid
2 panel, the panel from the side is solid panel. I'm not
3 saying it is canvas, but solid panel that goes up and
4 pulls out. That is obviously stronger than the canvas
5 that we have. So we can see a big difference in the
6 two, in terms of preventing the debris from falling in.

7 Q. If you say that it is there, can you show me precisely
8 which claim it says that it is able to stand up to heavy
9 repetitive use?

10 A. What I'm saying is being a solid panel that we open up,
11 you would see that it's implicit that we can prevent
12 debris from a tent, because a tent does not solve the
13 debris from falling in. Now we are using a panel that's
14 on the side that forms the wall of the vehicle. The
15 wall of the vehicle is solid, and then they open up,
16 it's solid. So when the debris falls, it is definitely
17 going to be better than a tent that they have killed
18 people.

19 Q. Dr Ting, I'm trying to make it as straightforward as
20 possible. You will be given an opportunity to explain
21 during the re-examination. I'm just asking, are those
22 features featured in the claims and if they are please
23 point them out to me? If it is implicit, just say "no".

24 A. To me it is, because of the panel. It is stated in the
25 opening panel. As I said, the side wall, the side. So

1 15:20 that itself tells that you that it is a solid thing, it
2 is not something soft.

3 Q. Is there anything in the asserted claims that suggests
4 that the invention must be able to withstand loading,
5 imposed by the heavier side walls?

6 A. It is implicit in the claim, as I explained just now.

7 Q. Is there anything, even implied, in relation to the
8 weight of the walls? Just show us.

9 A. No, we did not put in the weight.

10 Q. Now, look at page 389, claim 10. Page 389, claim 10.

11 A. Yes.

12 Q. I'm going to ask you to explain to the court what you
13 mean by "substantially horizontal".

14 A. "Substantially horizontal" means horizontal enough for
15 you to provide a shelter. The word "substantial" means
16 enough. So if you open the panel, until it is not
17 enough for you to operate, then it is non-functioning.
18 So the panel must be opened substantially enough to
19 provide the area of operation and shelter. It is as
20 simple as that.

21 In areas that is bigger and longer we can -- we will
22 open wider and we slide further. The areas that are
23 smaller, we will open slightly lesser, but it must be
24 operational. It must have enough space for you to
25 operate, and enough space for you to cover. That is

1 15:22 substantially horizontal.

2 Q. Engineering, as I mentioned earlier today, depends on
3 precision. Do you have some number in mind?

4 A. This is where engineering fails you. In what sense.
5 You see, if you were to fix a number and say my vehicle
6 must open at 19-degrees and there's no way to open at
7 19-degrees, but you're at 20, you cannot function.

8 The ability of this panel is to open at angle that
9 we can adjust. It is actually adjustable, and it comes
10 to a point where you are, what we call, substantially
11 enough or horizontal. So there is in fact no definition
12 where it got to be zero degrees or near zero, because
13 this is not covered in our -- it is covered in terms
14 of -- the word substantially horizontal is, I think,
15 very clear. We must be enough for you to work, enough
16 for you to cover. So I would not buy the thing of the
17 degree and all that.

18 Q. So what you mean is it has to open enough so that
19 someone can stand under the shelter to operate?

20 A. To do -- to operate, and provide protection and
21 function.

22 Q. Now, Dr Mak suggested this morning that anything that is
23 less than 45-degrees from the horizontal, that is his
24 definition of substantially horizontal. Do you agree
25 with him?

1 15:23 A. He did not say that.

2 Q. What did he say then?

3 A. He said that he is not an engineer, and in the school
4 that he is in, a 45-degree is where the neutral is. So
5 for a layman, like him, anything above 45 can be
6 considered horizontal, anything below that can be
7 considered vertical. So he did not say what you say.
8 So I think for him he is expressing the ambiguity that
9 you are trying to -- for us, and people we are working
10 with this, what the important word here is it must be
11 enough for to you operate. If you need to and open up
12 fully, you open up fully. If you can slide another two
13 panels up, you open up. If you cannot, you open up to
14 a certain degree, so be it. But you can operate. So
15 whether it is 19, 20, 21, it must be able to operate.
16 It is not the degree.

17 Q. Dr Ting, I actually find that challenging, because it
18 then depends on how tall the vehicle is. Do you agree
19 that if the pivot of the movable panel is, let's say,
20 30 feet high, and it opens up only by even 20-degrees,
21 there will be sufficient coverage, overhead? Do you
22 agree?

23 A. Of course not. 30 feet high is a two-story tall
24 building. This is a vehicle that's on the road, not
25 two-story high.

1 15:25 What you want is to have a vehicle that goes into
2 the terrain of places, that can allow you to open to the
3 level you want. With no regard whether I am 15, 20, 21,
4 I can operate. And just because I have to be 19, if it
5 does not have 19, my thing can't open, then you are in
6 trouble. So we are not -- we don't even put the degree
7 in, because it is irrelevant. It is the function of
8 enough cover allowing work to be done, allowing the
9 function of the whole first aid post to be operational.

10 Q. So I take it that the person who is below has to be able
11 to reach up to the conduits above. Is that right?

12 A. In our design, yes, eventually this is completely
13 mechanised. So it actually, with a press of a button,
14 the whole thing opens up, the roof comes down. So if
15 you were to look at why they're hanging things there,
16 because the roof comes down where your equipment can be
17 hanged. So the person does not need to climb a ladder
18 to go and reach the roof, the roof actually comes down,
19 the second roof.

20 Q. Again, if you look at your claims, nowhere does it
21 feature this function where you press a button and the
22 roof comes down. It does not. Show me where it is
23 featured.

24 A. The whole mechanism, in terms of patent, you are able to
25 do it. Either if we use hydraulics, then we will have

1 15:27 a hydraulic system. If we have a mechanised method,
2 then we will have a control. You obviously do not
3 expect the vehicle to reach there intelligently, like a
4 transformer, become -- so you need a control and that is
5 any skilled person would know. So you need a control.

6 When you reach there, then the person looking at the
7 situation press a control, and then activates the whole
8 chain of events. Now, that control may eventually, one
9 day, become voice-activated. It may even be remote
10 control activated. But it doesn't mean that you have
11 not breached the patent, because the patent does not
12 tell you how I activate. It tells you the whole concept
13 of how it opens. Now you can open it in many methods,
14 including solar panel later on. It does not change the
15 concept. So, eventually, we are looking at control that
16 you are talking about, which is not the operation.

17 Q. Dr Ting, do you agree with me that your patent does not
18 cover any mechanised feature in the asserted claims?

19 A. We did not stipulate any specific mechanised feature.

20 Q. So it is not there?

21 A. We did not stipulate.

22 Q. There is no control feature stipulated in the claims
23 either, agree?

24 A. Agreed, because anyone skilled in the art would know you
25 would need to control.

1 15:28 Q. You also mention that the roof comes down. I don't
2 understand this roof comes down. Are you referring to
3 the extension panel being extended?

4 A. There are two parts. One the is extension panel. The
5 other part, if you refer to figure 5, some of these
6 parts hang on the roof, as you can see, those things
7 that hang on the roof. For the ones that we make for
8 civil defence, we even make that roof movable. That
9 comes down.

10 Q. Dr Ting, let me stop you there. That is not one of the
11 asserted claims, correct?

12 A. It is not. It is just to tell you how the roof can
13 move.

14 Q. I'm just going to make reference to page 391, at claim
15 20, now because I could not find any definition of the
16 words "substantially horizontal", I was forced to look
17 elsewhere within the claims. I found it, curiously, at
18 claim 20. So let me read to you the final paragraph of
19 claim 20. It says:

20 "[The] seat structure pivotally mounted to said
21 fixed structure proximate or at said floor to, in a
22 first pivotal condition present a substantially
23 horizontal support surface above the surface of said
24 floor to allow a person within said enclosure to be
25 sedentary thereon and in a second pivotal condition

1 15:30 different to the first, present a substantially
2 horizontal surface ..."

3 So here you see the words "substantially
4 horizontal":

5 "... substantially horizontal surface immediate of
6 said floor and the ground adjacent said vehicle to allow
7 a person to be supported thereon."

8 You see the words there? The words "substantially
9 horizontal" is there. My question is: Is it there?

10 A. Yes, it is there.

11 Q. So if you turn to page 394 of the agreed bundle, you
12 will see figure 62. That is the hold-out sideboard,
13 correct?

14 A. Yes, it is.

15 Q. Then when you flip it up, you will see it in the up
16 position at number 61, correct?

17 A. Yes.

18 Q. So flipping back to page 391, the claim requires this
19 bench to be substantially horizontal so that someone can
20 sit on it, correct?

21 A. Yes.

22 Q. Would you agree with me that at 45-degrees, nobody can
23 sit on it? "Yes" or "no"?

24 A. You are wrong, because -- can I just explain.

25 Q. Just answer, can someone sit on it first, "yes" or "no".

1 15:32 45 degrees.

2 A. No one can sit at 45. We are not talking about 45.

3 Q. Can someone sit on it even at 30 degrees? If it is
4 30 degrees, if the bench is 30 degrees from the
5 horizontal, can someone sit on it?

6 A. It is certainly not for sitting.

7 Q. Okay.

8 A. Can I clarify? Your Honour, just to clarify that point.
9 When I say substantially horizontal, we are referring to
10 the panel, not the seat, and the seat itself we did not
11 say it was 45 degrees to sit. So if you were to look at
12 your own -- just now the claim 20, and you say you
13 couldn't find the word substantially horizontal, may
14 I refer you to a little bit further up? And around line
15 5 or 6 it is written there:

16 "... condition whereby the panel defines [the] side
17 [et cetera, whereby] at least one panel is in
18 a substantially or near horizontal [position] ..."

19 This is the panel we are talking about. Not the
20 seat.

21 Q. Dr Ting, I understand that. I'm saying that this degree
22 of substantially horizontal is not defined anywhere.
23 But over in the paragraph I referred you to, the final
24 paragraph of claim 20, it at least explains to me what
25 is intended presumably by the inventor. Because

1 15:33 someone, because you see it uses the words

2 "substantially horizontal surface", it must permit the
3 person to sit on it, correct?

4 A. Correct. If you look at the design of the stool, there
5 can only be two position, horizontal this way to sit or
6 you flip it up to sit, and the stool is meant to sit.
7 It is not meant to be operation part.

8 Q. If you can turn to page 371. This comes from the
9 disclosure of invention segment of your patent. And the
10 second full paragraph, at page 371, starts with the
11 words "a seat", so just let me read that portion:

12 "... a seat structure pivotally mounted to fit said
13 fixed structure proximate or at said floor to, in a
14 first pivotal condition present a substantially
15 horizontal support surface above the surface of the said
16 floor to allow a person within said enclosure to be
17 sedentary thereon ..."

18 So again this paragraph gives me some guidance as to
19 what substantially horizontal means. Do you agree?

20 A. Agree.

21 Q. Can you share with us what you think is the maximum
22 angle that a seat could be for someone to sit on, the
23 angle from the horizontal?

24 A. You can sit at any angle, it is the amount of comfort
25 and discomfort you can get. So if you have a very

1 15:35 uncomfortable angle, you won't sit very long, and it
2 depends on your weight as well, from the doctor's point
3 of view.

4 Let me refer you to the seat, so-called the seat at
5 the bus stop, if you happen to take bus. The seat at
6 the bus stop is at 60 degrees. It is not meant for you
7 to sit long, because it is supposed to wait for bus and
8 go, but it is definitely not horizontal. But if you
9 look it the aeroplane, you are going to sit for
10 13 hours. It is not only the seat that is horizontal,
11 the whole thing needs to be horizontal for you to sit.
12 So it is really not the angle of sitting. This is an
13 operation where people are not going for a trip. So the
14 functional part is for people to sit that is able to --
15 for the personnel, to actually be able to do the
16 function and treat the patient and go back and park it
17 up.

18 So you see the design is this way is horizontal is
19 functioning. When he flip it up it becomes a personnel
20 carrier inside. Both functions as a quick deployment
21 and quick keeping up of the whole vehicle. So if it had
22 to be in one day, the military says "I need to put
23 people at 45-degrees", we will design a 45-degree seat.
24 But it is the function that is important.

25 Q. Dr Ting, I've been in the army as well, and some of the

1 15:37 distances I travel from one point to another point in
2 the vehicle exceeds 60 kilometres in a single journey.
3 So my point is this, the patent is there to provide you
4 with a monopoly, you are the inventor, and you don't
5 know what is substantially horizontal?

6 A. We know, I disagree with you.

7 Q. Then tell me what is the degree?

8 A. I told you, it is not determined by degree. The
9 function is important. Let's be clear. When we talk
10 about the panel, I already stated the panel is for
11 enough room for you to operate and cover with the
12 function on the top to provide element coverage, the
13 chair or rather the stool part had to be substantially
14 horizontal to be able to transport people in the design
15 that we have. It does not mean that I must, if I did
16 not specify the degree of this chair this whole patent
17 does not function. The function of this whole chair is
18 so that they can deploy -- or the stool is such that
19 they can deploy it for personnel when they are rescuing,
20 when you flip back, they carry personnel inside, and it
21 is exactly stipulated in your tender as well. The
22 tender document says you must carry 12 people. How are
23 you going to carry 12 people in your vehicle if you do
24 not provide that seat? That seat provides for 12
25 operating -- because in the tender of -- and that is

1 15:39 exactly what you -- did you say that it is not
2 horizontal, you need to provide a vehicle -- a seat for
3 them, for 12 people.

4 So it is implicit inside and again it is not
5 specified what degree the seat that you have for your
6 (unclear) vehicle, but you made the vehicle somehow.

7 Q. Dr Ting, can I refer you to page 375, at the second full
8 paragraph.

9 A. Second?

10 Q. Second full paragraph. So somewhere in the middle of
11 the page. So this is still in the detailed description
12 of the invention?

13 A. Yes.

14 Q. So from line 4, it actually says, do you see the words
15 "In the open", last three words:

16 "In the open condition the side panel extends from
17 the fixed structure of the compartment approximately
18 horizontally or at a slight angle to and below (or less
19 preferably above) the horizontal ..."

20 That must have been what you meant by "substantially
21 horizontal". Do you agree?

22 A. This is one of the embodiment. As I said, the
23 substantially part refers to function. We have gone
24 through this many times.

25 Q. I suggest to you that a skilled person reading this

1 15:40 would not have interpreted a slight angle to mean
2 30 degrees. Do you agree?

3 A. I think this is playing on the word "slight" because to
4 me slight could be 35, it could be -- so I don't think
5 I can comment on that "slight". An engineer would be
6 able to probably give you a better idea, but for me the
7 word is the function. If you have to open at 31 degrees
8 for the function you open you open at 31 degrees. If
9 you open at 29 you have to open at 29. But if it
10 doesn't function even at zero degrees it won't function.

11 Q. You know that the plaintiff's case is that anything more
12 than 19 degrees is not substantially horizontal. Do you
13 agree with it?

14 A. We don't agree.

15 Q. I put it to you that angles over 19 degrees would not be
16 considered substantially horizontal?

17 A. I totally disagree.

18 COURT: Do the transcribers require a break? Let's take
19 a 15-minute break.

20 (3.42 pm)

21 (A short break)

22 (4.05 pm)

23 MR LECK: Obligated your Honour.

24 I just have a few short questions on the
25 substantially horizontal point that goes towards

1 16:03 infringement, and then I will move on.

2 Dr Ting, can I just refer to you page 385 of the
3 agreed bundle. This is the segment of detailed
4 description, and if I can refer you to the final
5 paragraph that begins with the words, "The or each
6 sideboard 9". Do you see that?

7 A. Yes.

8 Q. Specifically, can you look four lines up from the
9 bottom. So this is still in relation to the fold-out
10 sideboards, and as I mentioned earlier I'm trying to get
11 guidance on the meaning of "substantially horizontal"
12 from portions away from the claims, since it is not
13 defined in the claim.

14 So it is still within your patent. Let me read what
15 this portion says:

16 "In the seat defining condition, the sideboard 9
17 provides an upper surface 61 which is located
18 substantially parallel to the plane of the floor but
19 located above the plane of the floor."

20 So do you agree that substantially horizontal as
21 used in your claim 20 must mean substantially parallel?

22 A. For the seat here, yes.

23 Q. Do you agree that the term "substantially horizontal" as
24 used in your claim 20 must similarly have the same
25 meaning in your claim 10?

1 16:05 A. Referring it to the panel, you are talking about.

2 Q. Yes?

3 A. Of course not.

4 Q. Do you agree with me that there is no guidance anywhere
5 in this specifications that tells us exactly what
6 substantially horizontal means?

7 A. In this particular paragraph and the one that follows,
8 that you are referring to, when we talk about the
9 seating, as you would refer to the diagram, if I may
10 refer you to a better diagram, which is actually found
11 in figure 7 and figure 8 on page 397, it will illustrate
12 for you the whole concept of having a bench or a stool.

13 That bench or stool in the function, whether it is
14 done out opening up, or flip up to contain people, in
15 that particular case when we say substantially
16 horizontal it is horizontal enough for you to do that.
17 Which is almost parallel. Whereas in the panel,
18 substantially horizontal, as I have explained, is to be
19 enough for you to function as a shelter. And the place
20 for you to operate. And depending on terrain the panel
21 may not open fully as you want, or open to an extent
22 that you get the maximal cover, but to use what is
23 intended for the panel to be used for the stool is
24 stretching it too far.

25 Q. The next reference, Dr Ting, is at page 386. The first

1 16:07 full paragraph on the page. The paragraph that begins
2 with the words, "The sideboard includes". This is still
3 under the section of fold-out sideboards.

4 If you look at the last line it says:

5 "The stepping surface 65 when the sideboard is in
6 the stepping condition is substantially horizontal."

7 Do you agree with me that for a person who is using
8 it as a sideboard to climb onto the vehicle, it has to
9 be almost parallel?

10 A. As long as you can have the leg to get a grip of the
11 hole you can climb up. So it does not need to be
12 parallel. Like a ladder strut, it can be a round strut,
13 but as long as you can put the foot in to climb up, you
14 can climb up. It doesn't need to be horizontal as with
15 claim.

16 Q. Dr Ting, do you agree with me that the claims are
17 extremely important since they define the scope of
18 protection that you have?

19 A. Yes, I agree.

20 Q. Do you agree with me that this scope of protection must
21 be equivalent to your entitlement to sue somebody for
22 patent infringement?

23 A. Yes, I agree.

24 Q. Do you agree with me that the term "substantially
25 horizontal" as prescribed in your claims is ambiguous

1 16:09 for someone skilled in the art to design it?

2 A. That person certainly is not skilled in the art, because
3 if you are skilled in the art you would not use the word
4 interchangeably. When we refer to the panel as being
5 substantial, as I said, it has a meaning, it is
6 a functioning meaning. When you refer to a seat and
7 a sideboard it has a meaning. When you start taking
8 things out of context, and just because this does not
9 mean that, it does not mean that my patent did not
10 cover. So I think you are pulling things out of the
11 context and not seeing the picture. And I think it --
12 the word "substantial" is what you are caught with. As
13 I said one is functionally enough, the another one
14 provides for a seat, which is something that you flap
15 up. Therefore it has -- yes.

16 Q. If you agree that the claims define your entitlement to
17 sue, then why did you not spell out exactly what the
18 degrees from the horizontal would be for it to satisfy
19 substantially horizontal?

20 A. We are the people who deal with mass casualty. And
21 therefore we know that a changing condition requires
22 a varying degree of the vehicle to open. If you were to
23 just put a 19 degree as you claim, or 20 degree, you are
24 totally taking it out, as I said, you can't open, it is
25 not the degree of open, with technology I can open even

1 16:10 up to 5 degrees, or I can open at 50 degrees. The
2 degree of opening is not important, it is the ability
3 for you to open to the point where the functions take
4 place. Therefore when you put in a patent you also put
5 in a preferred embodiment, but it does not limit to it,
6 it actually covers the degree, whether it is, you know,
7 functioning as of 15, 20, 21, it does not matter,
8 because it is not the degree, as I think we have gone
9 through it many times.

10 So we are well protected because the patent allow us
11 to open to anywhere that is substantially enough for
12 functioning. If we put 15 and it doesn't open until 18
13 what does it mean? The patent fails? Of course not.

14 Q. So if I understand your explanation correctly, Dr Ting,
15 are you suggesting that even a 15-degree opening
16 suffices?

17 A. I'm going to make it clear for you. It is not the
18 degree. It is the ability to open to a functioning
19 level that allows you to operate and do what you want to
20 do.

21 So if it had to be 15 we will open to 15, if it had
22 to be 20, because the covering part of the terrain does
23 not allow us to do that, we will do the point where we
24 can open. So it is not the degree that you are trapped
25 with, it is the concept of how do we open. In some of

1 16:12 your patents that you have actually cited you will find
2 there is an all or none law. Meaning if in this
3 mechanism either I open full or I close, I cannot open
4 halfway. Not in this patent. You can open to the
5 degree you want, which is substantially enough for you
6 to function. Therefore when we split hairs over the
7 degree, you have lost the spirit of the invention, and
8 the person skilled in this art I certainly think that he
9 can understand.

10 Q. You made a point regarding opening the panels
11 sufficiently enough for the medical doctors underneath
12 the coverage to work. So my question is: you could have
13 claimed it that way. You could have drafted it in your
14 claims that way, correct?

15 A. We chose not to because we have wider protection than
16 putting a claim that says 15 degrees or 19 degrees. We
17 have managed to get coverage for a wider protection.

18 Q. Do you agree that this selection is presently causing
19 ambiguity as to whether someone infringes or does not
20 infringe. Do you agree?

21 A. Certainly not. Otherwise we would not be here.

22 Q. You understand that the concept of the claims introduces
23 certain limitations on your patent protection, agree?

24 A. Can you say again?

25 Q. You understand that there are certain limitations

1 16:14 introduced within the claims? Do you understand that
2 there are limitations to the claims as to what you are
3 entitled to protection?

4 A. Yes.

5 Q. So what you draft, such as your substantially
6 horizontal, would be, to me, a limitation of your claim.
7 Your claim limitation?

8 A. This patent has been substantially examined by our IP
9 examiners and the Danish examiner. It has also been
10 substantially examined by eight countries with not
11 a single objection from Israel to US to Japan, to
12 Malaysia, and to Taiwan. Are you saying that they are
13 all also ambiguous?

14 Q. I'll come to that later.

15 So your answer is that you disagree?

16 A. I disagree.

17 Q. Dr Ting, can you turn to page 389 at claim 10. Four
18 lines from the bottom the line reads:

19 "... erected condition wherein said at least one
20 panel is in the substantially or near horizontal
21 condition ..."

22 Your Honour will be pleased to know I'm moving on
23 from substantially horizontal. Now I'm on near
24 horizontal. Can you tell me what near horizontal means?

25 A. If you follow the word before it is "substantially or

1 16:15 near horizontal", whichever can give you the best
2 function. If you can fully open up to near horizontal
3 at the best function you do so. If you cannot, you
4 limit to what the terrain tells you. Again it is the
5 function, the two words before is "substantially or
6 near". So if you cannot be near you go substantial, and
7 therefore it is the function.

8 Q. So you use these two words interchangeably?

9 A. Functionally it is what it is meant to cover.

10 Q. So you are telling us there is no difference between
11 them --

12 A. I didn't say that.

13 Q. So I'm asking you, are you using it interchangeably,
14 "yes" or "no"?

15 A. It is not -- no.

16 Q. You are not using it interchangeably?

17 A. It is not used interchangeably.

18 Q. If that is your answer there must be a difference
19 between the two, correct?

20 A. Of course.

21 Q. So explain to the court the difference.

22 A. As mentioned here substantially or near horizontal.
23 Meaning if I have a choice this machine will open as
24 wide as you can to provide the biggest coverage, but if
25 you are limited by the conditions outside then you will

1 16:17 reduce, but it must be substantial enough for you to
2 function. So --

3 Q. Dr Ting, I'm going to put it to you that you are being
4 deliberately evasive. It is a simple question. Let me
5 try and make it even clearer for you. Near horizontal
6 and substantial horizontal, which one is greater from
7 the horizontal?

8 A. Near horizontal is definitely, from here it is greater
9 than substantial.

10 Q. So in terms of degrees, let's say from a horizontal, you
11 would suggest near horizontal as 45 degrees, and
12 substantially horizontal as 10 degrees, is that it?

13 A. It is not it.

14 Q. From the horizontal?

15 A. If you were to look at horizontal as being zero then
16 anything that comes down from it, of course will be near
17 horizontal as you go towards. In the function of this
18 vehicle, if we cannot open it, as I said to this, then
19 substantial means the -- up to the best ability we can
20 open for the function.

21 Q. Maybe you draw a diagram for me, what you would --

22 A. No, I don't think it is inside the diagram.

23 Q. No, you just draw a line to indicate the horizontal, and
24 what you would perceive to be near horizontal and what
25 you would perceive to be substantially horizontal?

1 16:18 A. You see, your Honour, the substantially horizontal can
2 be near horizontal. As long as the condition allows you
3 to open as fully as possible. But if the condition does
4 not allow you then you open to the point where you
5 could. So I can draw you the most possible horizontal
6 level that the machine can by the limitation, but
7 whether at other point that is substantial or not it is
8 up to the terrain. So the terrain will determine that.
9 Do you understand my point?

10 Q. I understand your point, Dr Ting, but it does not help
11 any party who may prospectively infringe. I will give
12 you an example as you clearly understand the concept of
13 patent law.

14 If I decide to do a freedom to operate search to see
15 if I infringe this term of substantially horizontal,
16 I need some clarity. So the difference between
17 substantially and near horizontal, you know, you are the
18 inventor, you should be able to tell me which has
19 a greater deviation from the horizontal.

20 A. See, this is exactly my point.

21 The machine -- the concept allows you to open to as
22 much as you want. So it is called near horizontal, by
23 the mechanism. But if we cannot open fully by the
24 terrain or the restriction we must open to the point
25 where it is enough for operation, and that can range

1 16:20 anything from below that.

2 Q. So enough for operation is what you referred to as
3 substantially horizontal?

4 A. Yes.

5 Q. And near horizontal is almost horizontal?

6 A. Would be the maximum of the mechanism that you deploy.

7 So if you use a certain mechanism developed by certain
8 engineers they will open at different limitation angle.

9 The certain mechanism may not open completely horizontal
10 because of the design there, so when you design certain
11 parts.

12 Give you an example. If you have a very heavy huge
13 side then you have to take the load, it will never be
14 fully horizontal, but if you have a smaller vehicle then
15 you are able to achieve a slightly higher, but it
16 doesn't matter, as long as we can operate inside. So if
17 you can't operate, and you have to go slower, so be it,
18 we will do smaller, but it must be functional.

19 Q. You agree that this functionality limitation is
20 not spelt out in any of the asserted claims, agree?

21 A. Disagree.

22 Q. Show us where it says in the claims?

23 A. If you look at all the claim 10 down onwards you will
24 see that the first thing is all those -- I mean, I'm not
25 reading the whole claim, the whole thing, but when you

1 16:21 go down the claim you will find that the provision for
2 you, for a person to stand inside, is written in there.
3 It must be able to open to the point where the person
4 stands inside, adjacent to this, must be able to operate
5 and be there. It is inside there.

6 So it allows you to have somebody inside and to open
7 and retrieve all the medical equipment up, so it is
8 after claim 10, the following claim that comes down. So
9 the adjacent person is also captured inside the diagram
10 where you can see how this thing opens up.

11 Q. I do not recall any person standing adjacent in the
12 diagram. Would you want to look at --

13 A. No, that means it allows the person to stand inside. We
14 write in the claim when you open it allows someone to be
15 inside adjacent to this wall, so that it opens up.

16 Q. Dr Ting, I'm going to move on to a new area. I'm going
17 to speak about the US patent application.

18 Can you look at paragraph 21 of your affidavit of
19 evidence-in-chief, volume 1. Page 9, paragraph 21 of
20 your affidavit?

21 A. Yes.

22 Q. You said at paragraph 21 that one of the objections the
23 US participant and trademark office, or USPTO, had
24 raised to your claims 10 to 14, 17 and 18 was that these
25 claims lacked novelty given US patent number 6223479,

1 16:24 correct?

2 A. Yes.

3 Q. I'm going to refer to this US patent number 6223479 as
4 D1. We have prepared a legend of some of the prior arts
5 so we will spare the court of repeating the patent
6 numbers. This term D1 has in fact been used by the
7 defendant's expert, I trust you are familiar with it.

8 So Dr Ting, I'm going to refer to this US patent as
9 D1. Holding on to your page here on the AEIC, can you
10 also pick up the agreed bundle volume 1 and turn to
11 page 194. Agreed bundle page 194. This is the cited
12 prior art D1.

13 A. Yes.

14 Q. Now if you look at page 462 to 475 of the agreed bundle?

15 A. Which one is it?

16 Q. Same bundle, agreed bundle, I just wanted to show you
17 the picture to make sure we are in agreement on D1. If
18 you turn to page 462, are you with me, Dr Ting?

19 A. Yes.

20 Q. 462 to page 475, this is the USPTO office action
21 summary, correct?

22 A. Yes.

23 Q. You would have received this from your patent agent,
24 correct?

25 A. Yes.

1 16:27 Q. If you just turn the page to 463, under the third
2 heading, "Disposition of claims", do you see it in bold
3 the left side?

4 A. Yes.

5 Q. Under this, paragraph 6, it shows that claims 1 to 14
6 and 17 to 24 were rejected on grounds of lack of novelty
7 given the prior art at D1, correct?

8 A. Yes.

9 Q. Then at paragraph 7, the same page, it also shows that
10 claims 15 and 16 are objected to, correct?

11 A. Yes, correct.

12 Q. If you now turn to page 466 at paragraph 7, this is what
13 the examiner explains. Let me read:

14 "Claims 10-14, 17-18 are rejected under [this is the
15 US patent provision] as being anticipated by Stockli
16 [which is the name of the applicant in D1].

17 Re claim 10, Stockli discloses a mobile first aid
18 post comprising a road vehicle a compartment carried by
19 said vehicle, defining a generally box shaped openable
20 enclosure [then it says] (see figure 1) for housing
21 medical supplies and equipment (the structure is capable
22 of housing medical supplies and equipment) ..."

23 So the examiner explains the rejection of each
24 element of claim 10?

25 A. Yes.

1 16:29 Q. In particular the issue of the prior art D1's use as
2 a mobile first aid post is addressed here at the third
3 line, correct.

4 A. Yes.

5 Q. And the issue that the compartment in D1 is carried by
6 a vehicle is also addressed in line 4, correct?

7 A. Yes.

8 Q. And the issue that the compartment in D1 was capable of
9 housing medical supplies it also addressed at line 5,
10 correct?

11 A. Mmm.

12 Q. If you turn to page 467, equally you will see from the
13 top half of the page that the examiner pointed out the
14 novelty objections for every one of claims 11 to 14, 17
15 and 18. You can see on the left side: re claim 1, re
16 claim 12, re claim 13, re claim 14, 17 and then 18,
17 correct?

18 A. Yes.

19 Q. So the USPTO examiner challenged novelty on the basis of
20 prior art D1 for every one of the claims you rely on for
21 this infringement action except for claims 15 and 16,
22 correct?

23 A. Yes.

24 Q. Now, isn't it true that as the patent applicant Dr Mak
25 and you could then file submissions to the USPTO if you

1 16:30 wished to object to the novelty objections raised by the
2 examiner?

3 A. Yes, we could.

4 Q. In fact, the office action summary made it clear to you
5 that this action was non-final?

6 A. Mmm.

7 Q. Correct?

8 A. Yes.

9 Q. So you also had time to respond, correct? So if you
10 look at page 463, look at 463 under "Status", which is
11 the second heading on box 2(b), it quite clearly says
12 that it is non-final, correct?

13 A. Yes.

14 Q. In fact, this was the first occasion that you had
15 encountered the objection from the USPTO?

16 A. Yes.

17 Q. So it was not as if you were under time constraints,
18 correct?

19 A. Correct.

20 Q. Now, if you look at paragraph 24 --

21 A. Of?

22 Q. Of your affidavit, paragraph 24 you claimed that to
23 expedite the grant of the corresponding US subject
24 patent you were advised to modify claim 10, such that it
25 includes the medical utilities features included in

1 16:32 claim 19, correct?

2 A. Correct.

3 Q. Claim 19, if you were to flip to page 390 of your agreed
4 bundle, it is all the way at the bottom. Now
5 I understand that this claim is not a claim that you are
6 relying on for the patent infringement proceedings
7 today, but claim 19, it effectively describes the
8 medical utilities feature which is provided in your
9 claims 1 to 9, correct?

10 A. Yes.

11 Q. So the only difference between claim 19 and claim 1 in
12 fact is that claim 19 is dependent on claim 10, in its
13 present form, correct?

14 A. Yes.

15 Q. So the effect of modifying claim 10 such that is
16 included the medical features which are featured in
17 claim 19 means that claim 10 is now dependent on
18 claim 1. It has all these medical utilities features
19 originally in claim 1, true?

20 A. In the modified form when we were -- claim 19 to claim
21 10, that becomes the independent claim.

22 Q. Yes, I know that. I will take through that. But I'm
23 saying that claim 19 if you look at it, it actually
24 features your:

25 "... supply of medical utilities selected from one

1 16:34 or more of compressed air, suction, water, and oxygen
2 which are accessible by a user for the treatment of
3 patients ..."

4 Agreed?

5 A. Yes.

6 Q. This language is in effect repeated, if you flip to
7 page 388 in claim 1, the second paragraph of claim 1?

8 A. Mmm.

9 Q. Agree?

10 A. Yes.

11 Q. Now, instead of arguing with the examiner that claim 10
12 was truly novel over the prior art D1, which is the
13 plaintiffs are now doing in this proceedings, Dr Mak and
14 you chose to add limitations to claim 10 instead. Do
15 you agree?

16 A. Say? What did Dr Mak do?

17 Q. Dr Mak and you are the inventors, you are the
18 applicants, so I'm saying that instead of filing
19 submissions to oppose the USPTO examiner's objections,
20 you chose to add limitations to claim 10, correct?

21 A. Yes, I'm Dr Ting.

22 Q. Yes. Sorry Dr Ting, so the answer is it is correct.

23 A. Yes.

24 Q. Now if you look at agreed bundle page 496.

25 A. Which page is it?

1 16:36 Q. Page 496. This is the response that was filed to the
2 office action by your US patent agents?

3 A. Yes.

4 Q. So if you turn to page 508, which is part of your
5 response, or your US patent agent's response, the first
6 half of that response explains the reasons for the
7 proposed amended claim 10. So let me just read this:

8 "Claims 10 to 14, 17 and 18 stand rejected under
9 [the relevant US provision]. As ..."

10 A. Where are you?

11 Q. Page 508, first line:

12 " ... as being anticipated by Stockli [which is D1]
13 ... The examiner is reminded by direction to [yet
14 another US provision] that anticipation requires each
15 and every element of a claim to be disclosed in a single
16 prior art reference. Claims 10 to 14, 17 and 18 are
17 allowable over Stockli for at least the reason that
18 Stockli fails to disclose each and every limitation in
19 any of those claims.

20 As amended, independent claim 10 recites at least
21 one panel including means for supply of medical
22 utilities selected from one or more of compressed air,
23 suction, water and oxygen which are accessible by a user
24 for the treatment of patients from a downwardly facing
25 major surface of at least one panel when in said

1 16:38 condition. The amendment to claim 10 incorporates
2 subject matter of claim 19 which is appropriately
3 cancelled."

4 Pausing there, the suggestion was you take away the
5 claim 19, the features that were originally in claim 19
6 and repeated in claim 1 are now introduced in claim 10,
7 correct?

8 A. That's correct.

9 Q. "Claim 10 is allowable over Stockli [D1] for at least
10 the reason that it now recites subject matter indicated
11 by the examiner to be allowable.

12 Claim 14 is amended to properly depend from
13 independent claim 10. Claims 11 to 14, 17 and 18 are
14 allowable over [D1] for at least the reason that they
15 depend from the allowable base claim 10."

16 So the reason you gave for the proposed amended
17 claim 10, that it should be allowed over D1, was because
18 D1 did not disclose a panel that featured medical
19 utilities on the lower surface of its movable panel,
20 true?

21 A. Yes. In the prosecution for the US patent, yes.

22 Q. Yes. Without this amendment to claim 10, claims 10 to
23 14, 17 and 18 would have been rejected for lack of
24 novelty, right?

25 A. Yes, it is a first response.

1 16:39 Q. So I suggest to you if you genuinely felt there was hope
2 of success in being able to overcome the back of novelty
3 objection arising from D1 you would have made at least
4 one attempt to overcome the rejection?

5 A. We have several options. One of them is that. But we
6 have decided to actually go on the advice of the US
7 attorney for a commercial reason. While we were
8 prosecuting this, in fact the US Army has come to see
9 us, both directly and through the ST Kinetics, and we
10 need immediate protection for US, and I think with
11 discussion with our patent lawyers on the commercial
12 reason we decided to take this option where we will
13 include, and we realised of course that it has no
14 limitation -- this is a limitation on the -- for us in
15 Singapore, because in Singapore we are already -- we are
16 approved, or granted. So we have a commercial reason
17 for going ahead with US patent to take the lawyer's
18 advice to actually amend it and then allow it.

19 Q. If that is the case, did you make an application for
20 what is known as a continuation to preserve your rights
21 under the original claims 10 to 24?

22 A. No we did not, we managed to get the claim granted, and
23 therefore we did not go onto this step.

24 Q. I put it to you that you could not overcome -- the true
25 reason you subjected yourself to this additional

1 16:41 limitation was not because of the commercial reasons
2 that you raise. Agree or disagree?

3 A. I disagree.

4 Q. I put it to you that you were advised that you could not
5 overcome the lack of novelty objection because of D1.
6 Do you agree or disagree?

7 A. I disagree.

8 Q. I put it to you that's why you elected to restrict the
9 scope of protection by amending claim 10. Agree?

10 A. I disagree.

11 Q. I will now move on to the EPO application.

12 Now, at paragraph 22 of your affidavit, page 9,
13 volume 1, you say that the EPO did not share the USPTOs
14 views. I should have clarified, the EPO means the
15 European patent office. You are say the EPO did not
16 share the USPTO's views, correct?

17 A. Yes.

18 Q. Instead, the EPO cited prior art D1 merely as technical
19 background, correct?

20 A. Yes.

21 Q. You go on to say that it is not relevant for purposes of
22 determining novelty or inventive step, right?

23 A. Yes.

24 Q. You still stand by this view?

25 A. Yes.

1 16:43 Q. Now, if you look at paragraph 15 of your affidavit at
2 page 6, you say that the EPO offered to you and Dr Mak,
3 on 17 January 2006, an opportunity to amend the
4 application documents within the month, right?

5 A. Yes.

6 Q. Then at paragraph 16, at page 7, you say that your
7 patent agent in Europe responded by requesting the EPO
8 to replace the originally filed 24 claims with only the
9 original claims 1 to 9, correct?

10 A. Yes.

11 Q. In other words, you volunteered the restriction of
12 protection, by abandoning claims 10 to 24?

13 A. No, you let me explain, your Honour. The system in
14 Europe, European system patent is different from the US
15 side, in particular, the EPO itself does not even take
16 the power of D1 to be obstruction. But what they have
17 a problem, or issue, is if they are of the same claim
18 set, which is the same family, you have to group them
19 and not make them each into an independent claim. So we
20 were having -- the reason for them to say that you have
21 too many independent claim in the one claim set, and
22 that's why they classify into three claims set, and the
23 three claims set then give you that discussion that you
24 had. So it is the way the European patent office
25 operates on this. Whereas the US patent looks at it and

1 16:45 examines from a different, and so is the Australian
2 patent office. So this is the reason and not because
3 claim 10 is not novel. It is for the rearrangement of
4 the claim set. So it becomes very clear that there is
5 some unity of the claim in each of those claim sets.

6 Q. I was not suggesting to you that abandoned it, because
7 of novelty. My question merely was that you restricted
8 the protection by abandoning claims 10 to 24. I didn't
9 offer any reason.

10 A. I will give you the reason --

11 Q. If you look at tab 32 of volume 2 of your AEIC?

12 A. Yes. Page?

13 Q. Page 691, tab 31. This is your letter from the European
14 patent agents.

15 A. Page 691?

16 Q. 691, right. This is their letter to the EPO. They
17 offered to delete claims 10 to 24, but claim that the
18 inventors would not abandon any of the subject matter as
19 originally filed. That was the point you were raising?

20 A. Yes.

21 Q. Now, claims 10 to 19 would cover the second aspect,
22 which is the extendible overhead coverage panels,
23 correct?

24 A. Yes.

25 Q. And claims 20 to 24 would cover the fold-out side

1 16:47 boards, correct?

2 A. Yes.

3 Q. So that effectively meant you would lose any protection
4 for features under the second aspect and the third
5 aspect, at the material time, correct?

6 A. For Europe, yes.

7 Q. Now, you say that you amended the claims to comply with
8 the patent laws applied by the EPO, which did not allow
9 more than one independent claim, right? You just
10 explained to the court. Was this the only objection
11 that concerned you?

12 A. No, I think for us we are very clear that with the
13 amended job that has been done, our protection is still
14 sufficient, and we are able to still operate -- we still
15 have freedom of operation in those areas. So with that
16 consideration, we actually are willing to go along with
17 it, and did the change.

18 Q. But at the time when you abandoned claims 10 to 24, you
19 had no protection on the second aspect or the third
20 aspect, correct?

21 A. We feel that the amended claim that you have put
22 together as a set itself, later on an --

23 Q. No, I'm talking about 27 January, at this material time.

24 A. Yes, we he did that. Yes.

25 Q. Once you deleted, there was no protection. You were not

1 16:49 thinking of protection on the second aspect or the third
2 aspect.

3 A. We deleted because we have amended the rest in the form.

4 Q. I follow, I'll come to that.

5 A. With that form, we feel that we have protection enough.

6 Q. I understand, but I'm saying at this time, on 27th,
7 before you made any further amendments, your suggestion
8 to the EPO was that you would jettison claims 10 to 24,
9 correct?

10 A. Correct.

11 Q. So at this time, had you been granted the patent, it
12 would have been only in respect of claims 1 to 9?

13 A. Yes.

14 Q. Then you would have no protection for the second aspect
15 or the third aspect, the extendible panels and the
16 fold-out side boards, correct?

17 So my question is, was your only reason for
18 restricting yourself to claims 1 to 9, at this time,
19 because of the lack of unity objection?

20 A. The principle reason is for the lack of unity, because
21 of the multiple independent claim in the claim set.
22 That is the principal reason.

23 Q. What were the other concerns?

24 A. It is still a commercial reason, because there were
25 interests. As I said, we need to have protection over

1 16:51 some areas fairly quickly, because interest came from
2 there. And therefore, I think we need to discuss with
3 the strategy with the patent lawyers, and strategies
4 over there and here, and this is what we decided to do.

5 Q. Okay. Dr Ting, I suggest to you that the reason is
6 because you knew that without the claims asserting
7 medical utilities, the chances of overcoming novelty
8 objections would be slim. Do you agree or disagree?

9 A. I disagree.

10 Q. I suggest to you that you were advised that the EPO was
11 amongst the most robust patent offices, in terms of
12 conducting prior searches. Agree or disagree?

13 A. Please repeat.

14 Q. I suggest to you that you were advised by your patent
15 agents that the EPO was amongst the most rigorous when
16 it came to conducting prior arts searches.

17 A. Yes.

18 Q. I put it to you that that is the reason why you
19 initially offered to retain claims 1 to 9, but abandon
20 the rest. Agree or disagree?

21 A. Disagree.

22 Q. Look at paragraph 17 of your affidavit of
23 evidence-in-chief at page 7. Paragraph 17.

24 A. I have it.

25 Q. Now, you say that on 6 August 2009, the EPO then issued

1 16:53 a supplemental European search report, where the EPO
2 raised the objection that the corresponding European
3 subject patent application lacked unity of invention.
4 In other words, there were three separate inventions in
5 the one patent application, correct?

6 A. Yes.

7 Q. Now, if you turn to tab 32 of volume 2 of the
8 affidavit. Tab 32, at page 698. Are you with me?

9 A. Yes.

10 Q. You can see the three separate groups of inventions are
11 identified, one, two and three. Claims 1 to 9 are:

12 "[First aid posts] with fluid supply."

13 Then 2, claims 10 to 19:

14 "A [first aid post] with an expandable extension
15 panel".

16 Then 3, claims 20 to 24:

17 "A [first aid post] with a seat structure" .

18 Then it explains:

19 "The application lacks unity within the meaning of
20 Article 82 EPC".

21 And each of claims 1, 2 and 3, they actually spell
22 out the special technical feature of each category of
23 the three aspects, correct?

24 A. Yes.

25 Q. So for instance, at the second paragraph 1, the special

1 16:55 technical feature will be your medical utilities,
2 correct? Again it is a repeat of the second paragraph
3 of your claim 1, right?

4 A. Where are you?

5 Q. Unfortunately there are two paragraphs 1 on the same
6 page. The second paragraph, Page 698. The second
7 paragraph 1, the words begins:

8 "The special technical feature ... representing the
9 contribution over the prior art, of claim 1 is that the
10 'medical utilities selected from one or more of ..."

11 And so on. And that language in the inverted
12 commas, that is effectively just taken out of your
13 second paragraph of claim 1, right?

14 A. This claim 10, yes. Not claim 1, it is claim 10.

15 Q. Keep your finger on page on volume 2 of the affidavit,
16 hold on to that page. Don't lose that page, because I'm
17 going to ask you to do a comparison. And then you take
18 the agreed bundle volume 1 at page 388, and you compare
19 the language at what I pointed out to you as the second
20 paragraph 1 in 698, with the second paragraph of page
21 388 of the agreed bundle. You see the words "medical
22 utilities selected?

23 A. Yes.

24 Q. " ...medical utilities selected from one or more of
25 compressed air, suction, water, and oxygen are provided

1 16:57 accessible by a user from the downwardly facing major
2 surface ..."

3 I'm reading from page 698 of your affidavit. So you
4 can see that this language is repeated in the second
5 paragraph of claim 1, not 10. Agreed?

6 A. Yes.

7 Q. And then it says:

8 "The problem to be solved by this STF is to provide
9 medical fluids to a patient placed under the panel."

10 This is really your special feature in the groups of
11 1 to 9 as filed, correct?

12 A. Yes.

13 Q. Then at the second paragraph, second paragraph 2, at
14 page 698, it then describes:

15 "The special technical feature ... representing the
16 contribution over the prior art, of claim 10 is that of
17 an 'extension panel' ... "

18 Then really the language used in 2 is again a repeat
19 of your second paragraph of claim 10, right? Then,
20 likewise, the third paragraph is a repeat of claim 20.

21 A. Yes.

22 Q. Now, looking back at paragraph 22 of your affidavit of
23 evidence-in-chief at page 9, while you hold onto this
24 page 698 of volume 2 of your AEIC, it is really this
25 supplementary European search report that you base your

1 16:59 opinion. Are you with me?

2 A. Yes.

3 Q. It is really this supplemental European search report

4 that you base your opinion that the EPO did not share

5 the USPTO's views, correct?

6 A. The EPO did not share the US view, yes.

7 Q. Right? And the reason is because you think that the EPO

8 examiner had cited D1 merely as technical background,

9 right?

10 A. Yes.

11 Q. And that it was not relevant for purposes of determining

12 novelty or inventive step?

13 A. Yes.

14 Q. That was what you said earlier?

15 A. Yes.

16 Q. Because if you look at page 696, the last entry on the

17 table is:

18 "US 6 223 479 1 (Stoeckli...)"

19 So that is D1. And under the Category A, if you

20 look at the legend all the way at the bottom, that

21 stands for "technological background"?

22 A. Yes.

23 Q. Now, if you recall, the USPTO's views was that claims 10

24 to 14, 17 and 18 lacked novelty, and were anticipated by

25 D1. That was the view that you now say the EPO does not

1 17:01 share, correct?

2 A. Let me correct this statement. The EPO cited D1, not as
3 a -- that makes us not novel, it is one of the patent
4 that provides a technical background, for which they
5 have to consider, and it is not what -- the view shared
6 together with the US side. Whereas the US side, based
7 on D1, we amended and then we put it on to the claim 10.
8 Whereas on the European side, the main objection was
9 still a multiple invention, three inventions in one, and
10 they are being lumped into one. So you need to put a
11 different -- unity of patent is actually not there, and
12 the claim set needs to be rearranged. D1 is mentioned
13 as a technical background, not as an objection. Yes.

14 Q. But you agree with me that, as at the date this European
15 search report was issued, you had already, through your
16 European patent agent, abandoned claims 10 to 24,
17 correct?

18 A. Correct.

19 Q. As such, when the search was being conducted, it was
20 a partial search, correct?

21 A. By the EPO.

22 Q. Yes?

23 A. Yes.

24 Q. In other words, the search did not extend to a search
25 for grounds of novelty, correct?

1 17:03 A. I would not be able to answer about EPO.

2 Q. I suggest to you that the search also did not extend to
3 grounds of inventiveness.

4 A. I do not think I can answer that, because definitely
5 they would have done that. For an EPO basic function,
6 you need to extend the three search, which is novelty,
7 inventiveness and industrial application.

8 Q. If you look at the bottom of the big table at page 696,
9 it actually says:

10 "The supplementary search report has been based on
11 the last set of claims valid and available at the start
12 of the search".

13 And if you look at the date of completion of search,
14 it was on 29 July 2009, correct?

15 A. Yes.

16 Q. But if you turn to tab 31, you will recall that as at
17 27 January 2006, you had already abandoned claims 10 to
18 24, correct?

19 A. Yes.

20 Q. So as a result, the search would not have considered
21 novelty grounds on the basis of claims 10 to 24?

22 A. That's correct.

23 Q. So I suggest to you that the EPO did not make a search
24 in relation to claims 10 to 18 specifically, agreed?
25 Because you had already abandoned it.

1 17:05 A. Yes.

2 Q. So I put it to you that the EPO could not have disagreed
3 on claims of novelty or inventive step on claims 10 to
4 14, 17 and 18, if it did not make a search in relation
5 to those claims to begin with, correct?

6 A. Yes.

7 Q. So I suggest to you that the reason why D1 was only
8 cited for reasons of technical background was because
9 the EPO had only made a search in relation to the first
10 aspect of your invention covered by claims 1 to 9,
11 right?

12 A. Stated by that.

13 Q. So now look at paragraph 18 of your first affidavit at
14 page 8. You say the EPO informed you, on
15 6 September 2010, of its intention to grant a European
16 patent on the basis of your amended claims 1 to 9,
17 right? So at this stage there was not any claims 10 to
18 24, right?

19 A. Right.

20 Q. Then at paragraph 19, you say that, on 13 January 2011,
21 your patent agents then reintroduced claims 10 to 24,
22 but made them all dependent to claim 1, correct?

23 A. Right.

24 Q. And claim 1 is obviously in relation to the medical
25 utilities aspects, right?

1 17:07 A. Yes.

2 Q. So this meant that your patent in Europe was restricted
3 to one which featured the medical utilities aspects, in
4 the sense that it must have the medical utilities
5 aspect, correct?

6 A. Correct.

7 Q. Without the medical utilities aspect, you could not have
8 overcome the novelty objections. You agree?

9 A. Claim 10 and the rest were made dependent on claim 1,
10 and claim 1 spells out the mobile first aid post.

11 Q. I'm saying that without this medical utilities function
12 that is described in claim 1, had you just considered
13 claim 10 independently you could not have overcome the
14 novelty objections. Do you agree?

15 A. In Europe, yes.

16 Q. In fact, if the only objection you were worried about
17 was the lack of unity invention, you could have filed
18 a separate patent application featuring only claims 10
19 to 18, which is the extendible overhead coverage panel
20 feature, on its own. Agreed?

21 A. Agreed. Cost was a consideration.

22 Q. I put it to you that you decided not to do so, because
23 you knew that the USPTO had raised these issues on
24 novelty on D1, which is featured in the EPO search as
25 technical background, you had known of this two years

1 17:09 earlier on 21 May 2007. Right?

2 A. Please repeat.

3 Q. I put it to you that you decided not to go and file
4 a separate patent application just featuring your second
5 aspect, because you knew that the USPTO had previously
6 objected on basis of novelty with D1.

7 A. No, not for that reason.

8 Q. I put it to you that you had been advised that there
9 would have been objection from the EPO on the basis of
10 novelty had a full search been done, full search meaning
11 inclusive of claims 10 to 24.

12 A. Possible.

13 Q. I put it to you that without the medical utilities
14 features in claim 1, you could not have overcome the
15 novelty objections, in this round of the application.

16 A. I would not know.

17 Q. Look at your second volume of the affidavit at tab 39,
18 page 891. Are you with me?

19 A. Yes.

20 Q. This is a letter of response from your patent agent to
21 the EPO, and there is reference to an e-mail to the
22 examiner on 16 December, at the second paragraph. First
23 and foremost, the letter explains, at the upper portion,
24 the reintroduction of claims 10 to 20, but you have now
25 made it subject to claim 1, correct?

1 17:14 A. Correct.

2 Q. If you read the last four lines of page 891 it says:

3 "Please note that basis for claims 10 to 19 was
4 provided in an e-mail to the examiner (Mr Gerard) on 16
5 December 2010, and the Examiner responded by telephone
6 indicating that he agreed there was basis for making
7 previous claims 10 and 20 dependent on claim 1."

8 So I take it that now you have reintroduced the
9 earlier claims which you had abandoned but making it
10 subject to claim 1, correct? So, again, the
11 reintroduced claims will now have to carry the feature
12 of the medical utilities, correct?

13 A. Yes.

14 Q. Now, Dr Ting, do you still maintain your position
15 featured at paragraph 22 of your affidavit that the EPO
16 examiner had taken the view that D1 was not relevant for
17 purposes of determining novelty?

18 A. I still maintain the view, because at the end of the it,
19 it was what was -- the strategy that we developed, and
20 decided to prosecute, it ended up with our action that
21 has been shown later on in your letter. We have
22 resubmitted, and it is actually based on that. So they
23 have not even bring this D1 to make any objection, even
24 when we put in.

25 Q. But you agree that any examination was not on the

1 17:16 premise of an independent claim 10, correct?

2 A. Correct.

3 Q. So I suggest to you, that your statement at
4 paragraph 22, that the examiner did not share the view
5 of the USPTO is a little misleading. Do you agree?

6 A. It is not clear.

7 Q. Thank you.

8 MR LECK: Your Honour, I'm wondering if it would be an
9 appropriate time.

10 COURT: Okay, we'll resume tomorrow. Give me 15 minutes to
11 take care of the earlier matter, so we'll resume at
12 10.15 am tomorrow.

13 (5.17 pm)

14 (The hearing adjourned to 10.15 am on
15 Tuesday, 3 July 2013)

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