### **PATENT ATTORNEYS**

### **EXAMINATION**

### PAPER C

### Foreign Patent Law

**Regulation 158** 

### (l)(c)

# Duration: 3 hours (plus 10 minutes for reading),

The Syllabus provides that questions may be asked with regard to the following countries, treaty and conventions.

Australia United States of America South Africa Peoples Republic of China Germany Malaysia Paris Convention Canada Japan Great Britain Mexico Taiwan European Patent Convention Patent Co-Operation Treaty (PCT)

This paper comprises 11 questions and has a total of 100 marks. Answer all questions

#### FOREIGN LAW PAPER 2003

#### **QUESTION 1**

You have been asked to assume responsibility for a PCT patent application filed by a sole private applicant inventor in New Zealand. The applicant is a recent immigrant from Taiwan and, at the time of filing the PCT application, was a Taiwanese citizen with permanent residency in New Zealand.

Since filing the international application he has remained a New Zealand resident but has become a New Zealand citizen and given up Taiwanese citizenship. He has sold a share of the patent application to a Taiwanese company and is now a joint applicant with the Taiwanese company.

(a) Advise your client on the right to file the PCT application. (3 marks)

(b) Is it possible to file a demand for international preliminary examination? Assuming that it is possible, advise your client on the procedure for filing a demand. (3 marks)

(6 marks)

#### **QUESTION 2**

You filed a PCT patent application for your New Zealand based client on 18 April 2003 relating to a lamp stand. You used IPONZ as the receiving office. The PCT application claims priority from a patent application accompanied by a provisional specification filed in New Zealand on 22 May 2002.

Your client experiences cash flow problems and cannot spend any more money on patenting this invention until January 2004 when he is expecting to acquire vast sums of investor capital. He intends to proceed with national phase entry in Australia, USA, Canada, Japan, South Africa, Mexico and Malaysia (the countries).

(a) What are the competent searching and examining authorities for your client? (4 marks)

(b) If your client decides not to file a demand for international preliminary examination what are the deadlines for national phase entry for each of the countries? (4 marks)

(c) Outline those of the countries in which examination must be requested on or after national phase entry and the respective deadlines for requesting examination. (4 marks)

(12 marks)

#### **QUESTION 3**

Describe the findings of the Canadian Federal Court in *Barton No-Till Disk Inc. and Flexi-Coil Ltd. v Dutch Industries Ltd and the Commissioner of Patents.* Also outline the implications of the decision for small entity and large entity patent applicants in Canada.

(6 marks)

**QUESTION 4** 

Your client has developed a new walking frame that she believes is a significant improvement over prior art walking frames. With the aging population in New Zealand and overseas your client believes there is significant commercial potential over the next twenty years.

Your client gives you a copy of a brochure describing a competitor's product (document 1) and explains how the client's walking frame differs from that described in the brochure. You do a preliminary novelty patent search and locate a published US patent application (document 2), a published PCT pamphlet (document 3) and a published German patent specification (document 4) that describe subject matter similar to your client's invention.

You prepared and filed a complete specification in the first instance in New Zealand on 26 May 2003. An examination report has issued in which the examiner raises a NZ patent specification describing a walking stick (document 5) against some of the claims. The document bears no relation whatsoever to your client's invention as claimed and does not come close to prior publishing the invention.

Your client wishes to file convention patent applications in Japan and the USA based on the New Zealand patent application.

(a) Explain the obligations placed on the applicant to disclose any of documents 1 through 5 to the Patent Office(s) in Japan and the USA should your client proceed with convention patent applications in those countries by 26 May 2004. (5 marks)

(b) Your client did not want to wait until next year and so you proceeded with convention patent applications on 9 June 2003 in Japan and the USA. A first Office Action on your client's USA case has just issued in which the examiner cites a published US patent application (document 6) against all of the claims. This patent application was filed in the USA on 15 November 2001 and published on 21 May 2003. Explain the obligations placed on the applicant to disclose document 6 to the Patent Office in Japan. (2 marks)

(continued over page)

(c) Assume the facts set out in (b) above. Your client has just located a further brochure (document 7) describing a similar walking frame published 9 June 2003. Explain the obligations placed on the applicant to disclose document 7 to the Patent Office(s) in Japan and the USA. (2 marks)

(9 marks)

#### **QUESTION 5**

You prepared and filed NZ patent application 507346 accompanied by a provisional patent specification on 5 October 2000 in relation to an improved animal handling device on behalf of your client. On 28 September 2001 you filed a PCT application claiming priority from the New Zealand application, and a corresponding complete-after-provisional patent specification on the New Zealand application. You have entered regional phase in Europe and national phase in the USA.

The New Zealand patent application has since proceeded to grant and is attached. Assume that the invention as claimed in claim 1 is novel but lacks an inventive step in view of prior art. Assume that claim 1 could be distinguished over the prior art if it was amended to include the novel and inventive features of both claims 2 and 3. Assume all other features of claim 1 are already described in the prior art.

(a) Prepare a revised claim 1 in a two part format for the European application. (4 marks)

(b) Prepare a revised claim 1 in a Jepson format for the US application. (4 marks)

(c) Discuss the significance of these two formats. (4 marks)

(12 marks)

#### **QUESTION 6**

Discuss the main features of patent term adjustment in the USA provided by the American Inventors Protection Act of 1999. Include in your answer a discussion of the 14-4-4-4 Rule, the 3 Year Rule, non-applicant delays and applicant delays.

(10 marks)

#### **QUESTION 7**

You meet a potential client at a cocktail function who is dissatisfied with his current patent attorney. He has a NZ patent with one independent claim and a set of dependent claims covering an industrial process.

Once the NZ patent was sealed he sued an alleged infringer and during the course of legal proceedings realised that he should have included one set of claims covering product by process and a further set of claims covering apparatus claims for performing the process.

There is fair basis in the patent specification for the additional claims and he is upset that his patent attorney did not raise the issue with him earlier. His patent attorney has since told him that he cannot add these claims to the New Zealand patent.

He mentions that he has a corresponding patent application in Australia and asks you whether he can add the additional claims to the Australian specification. You tell him you will look into it.

The next morning you check the IP Australia database. The Australian application has been accepted and published on 27 June 2003.

Advise your potential client outlining any options available in Australia. Highlight relevant differences between Australian practice and New Zealand practice.

(6 marks)

**QUESTION 8** 

Outline the opposition procedure for a European patent application.

(12 marks)

#### **QUESTION 9**

You are about to file non-convention patent applications in Taiwan, Mexico, Malaysia and China directed to a protective face mask when your client tells you that she has been selling the same masks to customers in these countries for the last five months.

Advise your client of any relevant grace periods in these countries and whether or not these sales would prejudice your client's ability to obtain valid patent protection in these countries.

(8 marks)

#### **QUESTION 10**

Your client has filed a patent application directed to an adjustable office chair in New Zealand with a provisional patent specification 8 months ago and has filed an innovation patent application in Australia. Your client wishes to obtain protection in Germany and the United Kingdom for his invention claiming priority under the Paris Convention from the New Zealand application.

Briefly outline the application and examination procedures in Germany and the United Kingdom, and any dates of publication of documents relating to the application. A detailed explanation of forms and fees is not required.

(8 marks)

#### **QUESTION 11**

You have filed a non-convention patent application in Australia for your New Zealand based client protecting a range of steel alloy bicycle frames. You filed the application on 10 February 2003. In March 2003 your client became aware of another party selling infringing frames in Australia.

(a) Advise your client on the steps it should take to secure grant promptly. (3 marks)

(b) Advise your client on the date from which he can claim damages for the alleged infringing activity. (3 marks)

(c) Your client wants to write to the alleged infringer telling them that they infringe his patent application. Advise your client on any benefits or risks of this. (2 marks)

(d) Your client believes that he will deter other infringers if he marks his bicycle frames with the word "patented". Advise your client on any benefits or risks of this. (3 marks)

(11 marks)

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#### PATENTS FORM NO. 5

Fee No. 4: \$250.00

#### PATENTS ACT 1953 COMPLETE

#### **SPECIFICATION**

After Provisional

No: 507346

Dated: 5 October 2000

#### IMPROVED ANIMAL HANDLING DEVICE

WE ROBIN CHRISTOPHER FELTRIM FAGAN, a New Zealand citizen of
RD 1, 1370 Mairoa Road, PIOPIO, New Zealand and CAROL ANN
FAGAN, a New Zealand citizen of RD 1, 1370 Mairoa Road, PIOPIO, New
Zealand

hereby declare the invention for which we pray that a patent may be granted to us, and the method by which it is to be performed to be particularly described in and by the following statement:

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#### IMPROVED ANIMAL HANDLING DEVICE

TECHNICAL FIELD

This invention relates to an improved animal handling device.

#### BACKGROUND ART

Reference throughout this specification shall be made to the use of the present invention for handling domesticated animals such as cattle, sheep and deer, although it should be appreciated that the present invention can be applied to other animals.

In particular, reference to the present invention shall be made to its use in animal directing devices such as sheep and cattle races and for the purpose for securing animals and applying a treatment thereto.

However, it .should be seen that the description is given by way of example only and should not be seen as limiting the present invention.

It is often desirable to be able to hold animals so that treatment can be applied thereto, or various measurements taken of the animal such as its weight.

Using sheep as an example, it is common to bolus, drench, take blood, apply and read ear tags, check teeth and so forth.

Various devices are known which are used for the above purpose, however these devices have a number of problems associated with them.

New Zealand Patent No. 209221 relates to an animal crush that has side plates which can be moved with respect to each other by pulling a flexible restraint, which can be used in the shearing or crutching of sheep.

The resultant action of the side plate movement holds the sheep in position in

order that it can be administrated to.

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One of the disadvantages of this construction is that some force is required to manually pull the restraint. Further, this process is not very efficient if used in a sheep race situation as the manual operation of the side plates takes some time.

Another problem is that the floor of this construction is a considerable distance above the ground and if used in a sheep race could impede the flow of animals therethrough.

Deer crushes are known such as those described in New Zealand Patent No. 196738. These are generally operated manually, although in some embodiments other means are used.

Deer crushes however cannot be used in a race type situation as they work by having the legs of the animal dangling free below the crush and this would impede the flow of animals through the race, impairing the efficiency of its operation.

Sheep weigh-crates are known which have sides that move parallel with respect to each other.

However, their operation makes it difficult for the animals to be quickly held and released and sheep weigh-crates typically have end gates in addition to side panels which can hinder access to the animal within the crate as well as interrupt the passage of animals therethrough.

New Zealand Patent No. 248929 relates to an animal handling device which comprises a fixed wall and a pivotable wall, there is a ram connected to the pivotable wall and when activated it will swing the pivotable wall in contact with the animal thereby securing the animal in its present position.

Whilst this invention overcomes most of the drawbacks with the other animal handling systems currently available, it still relies on an operator to activate the

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ram to move the pivotable wall, this means that under normal operating conditions: the animals are generally secured at random points throughout the animal handling device and some can even pass through without being secured.

In order for the animal handling device to be efficient it is necessary that all animals are secured, in turn, by the animal handling device and it is preferable that the animals are secured at roughly the same position within the animal handling device as this will remove the necessity for the operator to move to different positions with whatever equipment is necessary for the administrations at hand.

It is an object of the present invention to address the above problems or at least to provide the public with a useful choice.

Further objects and advantages of the present invention will become apparent from the following description which is given by way of example only.

#### **DISCLOSURE OF INVENTION**

According to one aspect of the present invention there is provided an animal handling device

including,

at least two side panels, and at least one

securing device, and at least one power

device, and

a sensor system containing at least one electronic sensor,

characterised in that

on the triggering of a sensor the power device, or devices, activates the securing device so as to secure the animal in the desired position.

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It should be understood that within this specification that the term "power device-shall refer to any means other than pure manual means by which a securing device can be moved, thus opening or closing the animal handling device.

In preferred embodiments of the present invention the securing device is one of the side panels moving with respect to the other side panel in order to hold the animal between the two side panels.

Examples of various types of power movement means, or power devices, include pneumatic or hydraulic rams, electric motors, engines or any other powered device.

The term "sensor system" should be understood to mean any system including at least one electronic sensor, wherein the movement or position of an animal can be used to trigger the circuitry in order to activate or deactivate the power device.

It should be appreciated that the circuitry can be controlled by other means and not just by a sensor eg: a manual override assembly.

It should be understood that the present invention incorporates all of the advantages within New Zealand Patent No. 275165 plus the ability to have the sensor control activation system.

It should also be appreciated that the present invention is intended to cover other animal securing methods and assemblies such as by activating a gate to impede the animal's movement.

In preferred embodiments of the present invention there will be at least two sensors, either of which can be used to determine when the animal within the handling device is in the correct position.

In some preferred embodiment of the present invention the restrained animal is released automatically once the administrating to the animal has been completed.

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This will be enacted by the equipment being used to administer to the animal, it will on completion of the task send an appropriate signal to the sensor system instructing the sensor system to release the animal.

In other preferred embodiments of the present invention the restrained animal is released when the operator manually triggers the sensor system instructing it that the animal is to be released.

It is preferred to use at least two sensors which are in different vertical positions in order to ensure that the animal is in the correct position whether its head is up or down as with only one sensor it is possible for the animal to have its head in a position where it will not always activate the sensor when the animal is in the correct possession.

The major advantage of the invention over the prior art is that the operator does not need to change position during their administrations to a number of animals, as the sensor system ensures that the animals are all held in very similar positions within the animal handling device.

This not only ensures that the operation being undertaken is far less time consuming and therefore more efficient, it also greatly reduces the level of fatigue placed upon the operator by having to move backwards and forwards with their equipment to animals restrained within different areas of the animal handling device.

One other advantage with the present invention is there is far less likelihood of the equipment becoming damaged through being dropped, or accidental collision with other objects, as the amount of movement of the equipment is greatly reduced.

One further advantage of the present invention is due to the fact that the time taken for administrating to any particular animal is reduced, therefore the time taken to administer to a number of animals will also be further reduced, having the

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benefit that this will reduce the stress placed upon the animals as they will spend less time out of their normal environment.

According to another aspect of the present invention there is provided a method of handling an animal,

including,

at least two side panels, and

at least one securing device, and

at least one power device, and

a sensor system containing at least one electronic sensor,

characterised by the steps of

- a) allowing an animal to enter the device to a point where it triggers at least one sensor, and
- b) using the sensor system to trigger the power device in such a way that at least one power device operates at least one securing device in order to hold the animal in the desired position.

It is envisaged that within preferred embodiments of the present invention the sensor system will incorporate infrared sensors.

This should not however be seen to be a limitation on the present invention in anyway, as in other embodiments other electronic sensor types can be used -for example ultrasonic, LED's etc.

#### BRIEF DESCRIPTION OF DRAWINGS

Further aspects of the present invention will now be described by way of example

03 JAN 2003

only and with reference to the accompanying drawings in which:

Figure 1is a diagrammatic representation of a side view of one preferred<br/>embodiment of the present invention, and

<u>Figure 2</u> is a diagrammatical perspective view of one preferred embodiment of the present invention.

#### BEST MODES FOR CARRYING OUT HE INVENTION

With reference to the Figures there is illustrated an improved animal handling device, generally indicated by arrow one.

Infrared sensors 2, are attached to the fixed side wall 3 of the animal handling device. Each sensor 2, is located in such a position that the animal 4, will activate at least one sensor 2, whether its head is up or in a downward position.

The animal 4, progresses along the floor 5, of the animal handling device until its head activates at least one of the sensors 2.

Next the sensor control system (not illustrated) activates the power device 7, in order that it moves the tilting side wall 6, into its closed position.

On completion of the administrations to the animal 4, a signal is sent to the sensor control system which will subsequently activate the power device 7, in order that it moves the tilting side wall 6, back into its open position.

Aspects of the present invention have been described byway of example only and it should be appreciated that modifications and additions may be made thereto without departing from the scope of the appended claims.

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#### WHAT WE CLAIM IS: 1.

1. An animal handling device, including at least onesecuring device, and

at least one power device, and

a sensor system containing at least one electronic sensor,

characterised in that

when an animal is in the desired position a sensor will trigger the power device to activate the securing device so as to secure an animal in the desired position.

- 2. An animal handling device as claimed in claim 1 wherein the securing device is one side panel moving with respect to another side panel.
- 3. An animal handling device as claimed in claim 1 or claim 2 wherein the sensor system consists of a plurality of sensors.
- 4.- An animal handling device as claimed in any previous claim wherein the restrained animal is automatically released once the administrations to the animal have been completed.
- 5. An animal handling device as claimed in any previous claim wherein the securing device includes a manual control facility.
- 6. An animal handling device as claimed in claim 5 wherein the restrained animal is released once the operator manually triggers the securing device, instructing it that the animal is to be released.

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- 7. An animal handling device as claimed in any previous claim wherein at least two sensors are located in different vertical positions in order to ensure that an animal in the correct position will trigger the sensor system, no matter which vertical orientation the animal's head is located in.
- 8. An animal handling device as claimed in any of claim 1 to claim 6 wherein the sensor system uses any appropriate type of electronic sensor.
- 9. An animal handling device as claimed in any previous claim wherein the sensors used are infrared sensors.
  - 10. A method of operating an animal handling device, including

at least one securing device, and

at least one power device, and

a sensor system containing at least one electronic sensor,

characterised by the steps of

- a) allowing an animal to enter the animal handling device to a point where it triggers at least one sensor, and
- b) using the sensor system to trigger the power device in such a way that at least one power device operates at least one securing device in order to hold the animal in the desired position.
- 11. A method of operating an animal handling device as claimed in claim 10 wherein the securing device is one side panel of the animal handling device moving with respect to the other side panel in order to hold the animal in the desired position.

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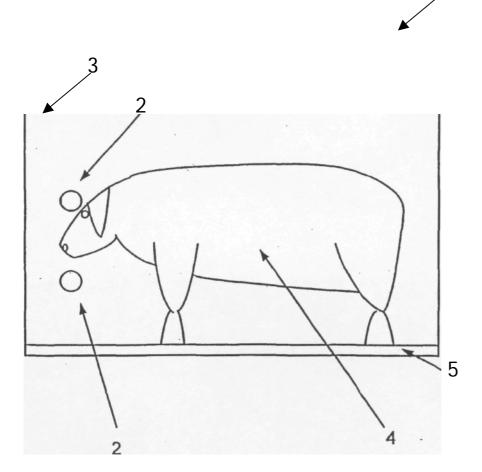
- 12. An animal handling device substantially as herein described with reference to and as illustrated by the accompanying drawings.
- 13. A method of handling an animal substantially as herein describe with reference to and as illustrated by the accompanying drawings.

### **END OF CLAIMS**

Carol Ann Pagan & Robin Christopher Feltrim Fagan

by their Attorneys

Fig 1



1/2

# FIG 2

