**NALSAR PROXIMATE EDUCATION**
**NALSAR UNIVERSITY OF LAW, HYDERABAD**
**P.G.DIPLOMA IN PATENTS LAW**

**2012-13**

## Paper IV - Abuse of Patents (Practical)

**Time: 2 ½ hours.** **Total Marks: 90**

### INSTRUCTIONS TO CANDIDATES

The questions to be interpreted as given and no clarification can be sought from the invigilator.

### Read the following material and answer the questions given below:

Your client is "Don't Worry Corp." They manufacture and sell bee hives in Canada, and also ship their products worldwide.

Bees are essential for pollinating many crops. Recently, a disease has been killing bees in large numbers, threatening the viability of beekeeping operations and potentially devastating certain crops. Your client believes that the key to reducing disease in bees is to maintain separation between bee populations, so that diseased bees from an infected colony have minimal contact with other colonies. One way to do this is to provide relatively small hive boxes that contain only a few bee colonies. It is also important to provide an easy way to remove the internal components for cleaning. He has developed a new type of hive that embodies his discoveries, which he believes will result in higher bee survival rates.

Your client's hive structure is housed in a rectangular box. Each box has a central vertical divider wall and a horizontal divider, thereby forming a total of 4 internal compartments on two levels. The top opens to permit access to the interior. The internal dividers are not fixed to the outside wall of the box, thereby permitting these internal components to be removed from the box from above, simply by pulling the entire internal structure up out of the box.

One of your client's innovations is a way to attach the honeycomb frames to the vertical divider wall by a pair of short pegs extending from one side of the frame, which fit within holes in the wall.

Each compartment holds 6-8 honeycomb frames, arranged vertically.

The most popular hive sold by Don't Worry is called the "A Hive" and is as follows:

Figure A is a perspective view of the beehive box, with the lid fastened in place.

Figure B is a plan view, from above, of the beehive box with the lid removed to show the internal dividers.

Figure C is a perspective view of the internal divider walls, removed from the box, with the honeycomb frames removed.

Figure D is a perspective view of a honeycomb frame, showing the pegs which permit the frame to be connected to the vertical divider wall. Figure D also shows a portion of the vertical divider wall to show how the frames are pegged to the wall. This drawing is not to scale with the other drawings – it has been enlarged to show more detail.

The exterior of the hive system consists of a rectangular box having a floor (not seen), four walls 12a to 12d and a flat roof 14, which can be removed to access the interior. The roof is screwed or bolted onto the box in a fashion which permits easy removal. The box is made from a single layer of rigid, lightweight synthetic such as polypropylene, or (for northern climates) a composite structure which consists of an exterior layer of a rigid plastic, a foam core, and an inner layer. The inner layer can comprise a cellulose (wood fibre-based) material. A composite of this type provides superior insulation, thereby extending the beekeeping season and reducing winter mortality. The material is rapidly becoming the material of choice for hives given that these must be trucked several times a year between farms.

The box can also be made from wood, which can be painted by the purchaser with an exterior-grade paint which contains various plastics to resist the elements.

Inside the box is a removable divider structure 20 which fits snugly within the interior of the box, and which is removable. The divider structure is essentially cross-shaped in side view. The structure consists of a horizontal panel 22 and upper and lower vertical panels 24a and 24b that are aligned with each other along a common plane. The panels 22, 24a and 24b divide the interior space of the box in half vertically and horizontally. The panels are fastened together, with the two vertical panels being attached to the upper and lower faces of the horizontal panel. The divider structure, when positioned inside the box, divides the interior of the box into four compartments that are effectively sealed from each other in a bee-proof fashion. In order to permit the bees to enter and exit the compartments and to provide ventilation, the box is provided with four openings 25 that communicate with the four compartments.

The vertical panels are each provided with an array of openings 30, consisting of upper and lower rows of 6 openings, facing into the interior of each compartment. In all, there are four such compartments (two upper and two lower) with each compartment having 12 openings. The openings permit attachment of the honeycomb frames. The exact number of openings is variable, and depends on the number of honeycomb frames that the customer wishes to install in the bee compartments.

Figure D shows a honeycomb frame 40 as supplied by your client with their hive system. It consists of a rectangular, open frame formed by 4 square rods. The bee farmer attaches a wax substrate, which is essentially a flat wax sheet, across the open portion of the frame. This forms the substrate for the honeycomb made by the bees. As the bees gather pollen, they build up their honeycomb out of the beeswax they create, and fill the comb with honey (or in some cases bee eggs).

The frames 40 are held rigidly to the vertical panels by upper and lower pegs 42 and 44, which fit snugly within the openings 30 within the vertical walls 24a and b. Each compartment holds 6 frames, spaced reasonably closely together. The exact spacing of the frames follows beekeeping standards that were developed a long time ago.

Your client supplies its hives as a kit, consisting of the following:

An external box, consisting of a square floor, 4 side walls, and a top. These panels are supplied in knock-down form, and bolts or screws are supplied to assemble these into the box.

The internal divider structure, which is also supplied in knock-down form. The customer assembles the structure by fitting the vertical panels 24a and 24b to the horizontal panel 22 by the supplied dowels, and gluing these together with epoxy glue.

24 hive frames fitted to the compartments.

4 removable covers for the bee entrance openings.

Complete instructions for assembling and using the system.

If the external box is supplied as a wood box, the instructions describe several types of paints that are suitable, which, depending on the climate, can consist of plastic-based or non plastic-based paints.

Your client purchases the components for his products from various sources, inside Canada and outside, and supplies them to customers as the kit described above. The typical customers are bee keepers, typically individuals or small family businesses, who tend to be technically knowledgeable.

Your client also sells the wax substrates (essentially a flat sheet made of beeswax) for attachment to the frames, as well as queen bees to populates the individual hives. These can be purchased separately from the hive boxes.

Your client also sells a somewhat different version of the hive, which he calls the "B Hive." In this version, there is higher ground clearance of the hive frames. This allows for the floor panel to be dispensed with. Instead, there are several wooden slats for structural support and wire mesh covering the open spaces between the slats to hold in the bees.

The internal divider walls are arranged somewhat differently in the B Hive. Figure E is a perspective view of an alternative version of the internal divider walls.

The divider walls of Figure E differ from the "A Hive" in that the horizontal divider 22 is located relatively high in the box to provide additional ground clearance, and the vertical dividers 24a and 24b are located closer to one side of the box than the other to provide smaller compartments on one side of the box, and larger compartments on the other.

Your client tells you that he has a competitor (Bee Happy Inc.) who owns patent no. 2,XXX,889 (the '889 patent). The owner of this patent makes a product that looks essentially like the one described in his patent. In the current tough economic climate, the competitor has become very competitive: several other hive-makers have been sued by the owner of this patent, so your client is very concerned about being stung by an infringement action. He wants you to tell him in plain and clear language whether he could be found liable for infringement.

Your client also informs you that he has been openly making and selling his hives for well over 2 years, and he is quite sure that Bee Happy has been aware of this for the entire time. However, they have not taken any steps against your client.

You check the file history of the '889 patent and discover the following:

One of the inventors initially named in the application was deleted during prosecution, on the basis simply of letter from the agent stating that this person was not an inventor. There is nothing on the record to indicate that the inventor consented or was informed.

The applicant faced several difficult prior art objections, and successfully argued that his invention was different from the prior art because the prior art described bee hives consisting of several levels with only 1 or two compartments per level. In contrast, his invention provided 6 or more compartments within a single level.

In answering the prior art objections, the applicant also filed some photographs of the prior art product to more clearly show differences between the invention and the prior art. You notice that the prior art is similar to the Bee Happy product, but does not seem to have removable internal dividers - these are clearly shown to be nailed in place. The prior art also has a peaked roof, and not a flat roof panel.

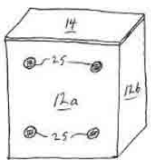


Fig. A

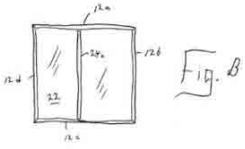


Fig. B

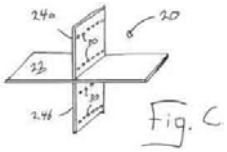


Fig. C

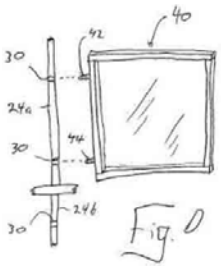


Fig. D

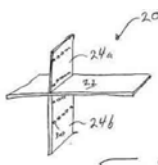


Fig. E

**Document 2: Patent CA 2,XXX,889**

Filing date: February 4, 1999

Issue date: June 21, 2002

Priority date: February 5, 1998

Inventors: George Smith, Belinda Jones

Patentee: Bee Happy Inc.

**We claim:**

A hive system for housing a plurality of bee colonies, the hive system comprising:

a hive system body, said hive system body having four exterior perimeter walls, including two end walls and two side walls, a solid floor, a roof panel, and a hive system interior space;

a center divider wall installed within said interior space, said center divider wall extending between said two side walls and dividing said hive system interior space into two hive system interior space portions;

a plurality of sub-divider walls each extending from one of said end walls to said center divider wall, further dividing said two hive system interior space portions into a plurality of hive chambers for housing bee colonies; and

at least two frame supports within each of said plurality of hive chambers for supporting a plurality of honeycomb frames.

A hive system as defined in claim 1 wherein said at least one sub-divider wall is removable.

A hive system as defined in claim 1 wherein said frame supports each comprise a horizontal load-bearing surface.

A hive system as defined in either of claims 1 or 3 wherein said frame supports are removable.

A hive system as defined in claim 1 wherein said at least two frame supports comprise upper and lower frame supports.

A method for assembling a hive system, comprising the steps of:

providing a hive system body, said hive system body having four exterior perimeter walls, including two end walls and two side walls, a floor, a roof panel, and a hive system interior space, wherein said perimeter walls comprise a multilayered wall having a wood interior and a plastic exterior;

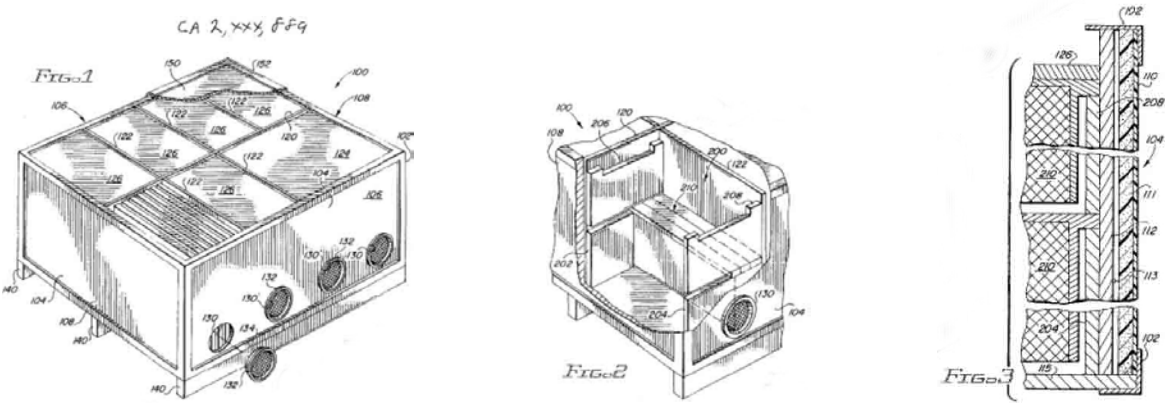
installing a center divider wall within said interior space, such that said center divider wall extends between said two side walls and divides said hive system interior space into two hive system interior space portions;

installing at least one sub-divider wall within said interior space, extending from one of said end walls to said center divider wall, so as to further divide said two hive system interior space portions into a plurality of hive chambers for housing bee colonies;

installing at least two frame supports within each of said plurality of hive chambers for supporting a plurality of honeycomb frames; and

supporting a plurality of honeycomb frames on said frame supports.

A method of producing honey comprising providing a hive system as defined in any one of claims 1-5 and generating a wax honeycomb containing honey within at least one of said hive chambers.




**ANSWER THE FOLLOWING QUESTIONS:**

*In answering this question, your client does not need you to provide background information about patent infringement (he is aware of this already).* ***He wants you to analyze each claim and provide a succinct and well-reasoned opinion as to why or why not his device might infringe the claim.*** *Where appropriate, you should mention and, more importantly, correctly apply relevant legal principles, including statutes, regulations, and jurisprudence. You should also discuss anything about the fact situation that might assist or hurt your client if he were to face an infringement action.*

**Q.1** Would your client infringe any claim of '889 when it sells its "A Hive" kit to a typical customer within Canada? **[50 marks]**

**Q.2** Does any aspect of the prosecution record of the '889 patent assist your client, if he is sued for infringement? **[5 marks]**

**Q.3** Would a hive kit sold and exported to a foreign customer infringe the patent? In such export sales, the foreign customer places the order with your client on-line, or by phone or mail, and pays by credit card or cheque. The customer pays for all shipping, brokerage, insurance and other fees, and your client arranges for the shipping, insurance etc. from its Canadian plant to the foreign customer. Please indicate whether any information is missing in order to provide a complete answer. **[5marks]**

**Q.4** Would the "B Hive" kit infringe claim 1? **[30 marks]**