1959 BETWEEN:
Sept. 21-25, UNIPAK
28-30,
Oct. 1-2, 5-9,
13-16,
Nov. 9-13,
16-19 CROWN

1960

Mar.14

UNIPAK CARTONS LTD.PLAINTIFF;

AND

CROWN ZELLERBACH CANADA)

DEFENDANT.

Patents—Infringement—The Patent Act, 1935, S.C. 1935, c. 32, s. 47—Patent Act, R.S.C. 1952, c. 203, ss. 48, 58—Infringement a question of fact—Onus of proof of infringement on plaintiff—Patent specification addressed to persons skilled in relevant art—Improvement may be infringement—Meaning of "transverse" and "mutually transverse"—Statutory presumption of prima facie validity extends to all attributes of patentability—Onus of rebutting presumption of validity on defendant—Breadth of claim not invalidating if terms clear—To be invalidating prior use must be prior use of invention—Evidence of anticipation by prior user to be subjected to closest scrutiny—Onus of proof of prior invention heavy.

The plaintiff sued for infringement of its Canadian Patent No. 540,725, for improvements in cartons for receiving and carrying bottles or other articles. The particular object of the invention was to provide a carton that was fitted with a movable handle by which the carton and its contents could be carried. Other objects were to provide a carton that could be returned with its handle undamaged so that it could be used again for packing new articles and to provide a handle component that was also a dividing partition forming cells in the interior assembly of the carton for the reception of the bottles or other articles to be carried. Claim 1 of the patent defined the invention as follows:

"1. An enclosed carton of the type having a wall structure comprising side and end walls and a bottom, said carton including a top closure, and mutually transverse partition members defining article receiving compartments therein, and in which one such selected partition member includes a handle portion and is movable between a first retracted position in which said handle portion lies beneath said top closure and a second operative position in which said handle portion projects above said top closure, wherein at least one other of such partition members is fixed to the wall structure and co-operates with said selected partition members to limit movement thereof outward of such wall structure."

The plaintiff alleged that the defendant had infringed its patent by the manufacture and sale of cartons of two types. Cartons of the first type came admittedly within the terms of Claim 1 of the patent but the defendant alleged that if it sold any cartons of that type after May 7, 1957, the date of the patent, which it denied, such sales were of cartons manufactured prior to that date and it was entitled to the benefit of section 58 of the Patent Act. The plaintiff pleaded in reply that the defendant had made untrue representations to the Patent Office in order to delay the issue of the patent and, in effect, charged it with fraud which disentitled it to any exemption from liability

under section 58. In respect of cartons of the second type the defendant denied that they were covered by any claim in the patent and counter- UNIPAK CARclaimed for a declaration that it was invalid.

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- Held: That whether a defendant has infringed the plaintiff's patent is a question of fact and the onus of proof of the alleged infringement is on the plaintiff.
- υ. Crown ZELLERBACH Canada LIMITED
- 2. That infringement cannot be established by conjecture, that there must be proof of it, that there was no evidence that the defendant manufactured any cartons of the first type after May 7, 1957, and that it did not manufacture any such cartons after that date.
- 3. That there was no credible evidence that the defendant sold any such cartons after May 7, 1957.
- 4. That there was no evidence of any improper conduct on the part of the defendant that would disentitle it to the relief that section 58 of the Act would have provided if it had needed to rely on it.
- 5. That the plaintiff's action must be dismissed to the extent that it alleged infringement by the manufacture or sale of cartons of the first type.
- 6. That whether the defendant infringed the patent by the manufacture and sale of cartons of the second type depends on the construction of the claims and whether the cartons came within them.
- 7. That the claims must be construed in order to ascertain what the invention defined by them is.
- 8. That a patent specification, which includes the claims, is addressed to persons skilled in the art to which the patent relates and that the claims should be read in the light of the common knowledge which such persons are assumed to have.
- 9. That if the Court is to construe the claims properly it must, as far as possible, be put in the same position as such persons would be.
- 10. That, ordinarily, this purpose is sought to be accomplished with the aid of expert evidence on such matters as the state of the art at the date of the patent, the meaning of technical terms and terms of art and the working of the invention.
- 11. That there are cases in which the claims are expressed in such plain and common language that the Court can construe them and ascertain the invention defined by them without any aid beyond the language used in formulating them and that Claim 1 of the patent is a claim of this nature.
- 12. That an improvement may be an infringement even if it is patentable.
- 13. That the fact that there are differences between the cartons of the second type and the cartons produced by the plaintiff does not determine the matter of infringement if the terms of Claim 1 are met by such cartons, notwithstanding such differences.
- 14. That it is essential to ascertain the meanings of the word "transverse" and the term "mutually transverse" in the Claim.
- 15. That it is an essential requirement of the Claim that there should be at least two partition members and that they should be mutually transverse, meaning thereby that each must lie across or be situated or lie crosswise of or athwart the other or be situated or extend across its length. The relationship between the partition members must be a reciprocal one. They must cross one another,

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- 16. That, although there was a seeming difference between the cartons of the second type and those produced by the plaintiff, all the elements specified in Claim 1 were present in them and they functioned in the manner specified in the claim to accomplish the unitary result contemplated by it and that the defendant has infringed the plaintiff's rights under it.
- 17. That the manufacture and sale of the cartons of the second type also infringed Claims 4, 5, 6 and 7 of the patent to the extent that each includes Claim 1.
- 18. That the statutory presumption of prima facie validity of a patent provided by section 48 of the Patent Act is not confined to the attribute of inventiveness but extends to the other attributes that a patent must have if it is to be patentable under the Act, such as novelty and utility, and that the three attributes of patentability, namely, novelty, utility and inventiveness are all presumed to be present in an invention for which a patent has been granted under the Act until the contrary is clearly shown.
- 19. That the plaintiff starts with the statutory presumption of validity of its patent in its favor, that the onus is on the defendant to rebut it and that the defendant has failed to do so.
- 20. That there is no support for the contention that the invention covered by the patent lacks utility. The cartons produced by the plaintiff had many advantages over the beer cartons previously in use and enjoyed a substantial market in the Vancouver area.
- 21. That Claim 1 might extend to a carton other than that of the second type but that does not make it ambiguous or avoidably obscure. Whether it would so extend would depend on whether the particular carton has the elements specified in the claim and whether they function in the specified manner.
- 22. The fact that the ambit of Claim 1 is broad does not invalidate it if its terms are clear and that the attack on its validity based on the charge of ambiguity and avoidable obscurity fails.
- 23. That if a patent is to be invalidated on the ground that the invention for which it was granted lacks novelty by reason of the fact that there was a prior use of it the party attacking the patent on that ground must show that the alleged prior use was a use of the invention described and claimed in it.
- 24. That the principles stated in the cases determining the requirements that a prior patent or other publication must meet before it can be considered as anticipatory of an invention apply with equal force in the case of an alleged anticipation by prior use.
- 25. That evidence purporting to show that the invention was anticipated by a prior user of it should be subjected to the closest scrutiny.
- 26. That the onus of proof of a prior invention is a very heavy one.
- 27. That the cartons put forward on behalf of the defendant as prior uses of the invention defined in Claim 1 were not prior uses of it.
- 28. That Claim 1 and Claims 4, 5, 6 and 7 to the extent that each includes Claim 1 are valid.
- 29. That the defendant's counterclaim is dismissed.
- 30. That the defendant is entitled to the costs properly attributable to the undue extension of time of the trial by the introduction of the issue of infringement of the patent by the manufacture and sale of cartons of the first type.

ACTION for infringement of patent.

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The trial was commenced before the President of the UNIPAR CAB-Court at Victoria and continued at Ottawa.

Crown

Gordon F. Henderson, Q.C., and David Watson for plaintiff.

ZELLERBACH CANADA LIMITED

Christopher Robinson, Q.C., Russel S. Smart and Hugh P. Legg for defendant.

The facts and questions of law raised are stated in the reasons for judgment.

THE PRESIDENT now (March 14, 1960) delivered the following judgment:

The plaintiff brings this action for infringement of its Canadian Letters Patent Number 540,725, issued to it on May 7, 1957, as the assignee of its plant superintendent, Steve Pasjack, the inventor of the invention covered by it. The defendant denies infringement and counterclaims for a declaration of invalidity of the patent.

The invention relates to improvements in cartons. At the trial the evidence dealt particularly with cartons for carrying a dozen bottles of beer but the patent does not limit them to such use. The particular object of the invention was to provide a carton that was fitted with a movable handle by which the carton and its contents could be carried. Other objects were to provide a carton that could be returned with its handle undamaged so that it could be used again for packing new articles and to provide a handle component that was also a dividing partition forming cells in the interior assembly of the carton for the reception of the bottles or other articles to be carried.

The invention is described in the specification and illustrated in its accompanying drawings. A beer carton embodying it was filed by counsel for the plaintiff as Exhibit 4. This exemplifies the beer cartons produced and dealt with by the plaintiff under its patent. It will, therefore, be convenient to refer to such cartons simply as Exhibit 4 or as Exhibit 4 type cartons, and since Exhibit 4 embodies the invention covered by the patent a specific description of it, consistent with that disclosed in the specification, will be in order.

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Exhibit 4 has a wall structure of side and end walls and UNIPAK CAR top and bottom closures of side and end flaps. The wall structure and the top and bottom closures are formed out of a single carton blank which is creased to provide the side and end walls and the side and end flaps of the top and bottom closures. The free end of the side wall portion Thorson P. of the carton blank at the right of the blank is provided with a tab which can be united with the free end of the end wall portion at the left of the blank, at what was called in the evidence the manufacturer's gap, by a pressure setting resin glue. Each of the side flaps of the top closure portion is cut back to form a recess for the grip portion of the handle member and at the centre of each recessed portion a finger drop is provided. I might here state that Exhibit 4 is made of fibreboard, also called chip board, box board or beer carton board, but corrugated paper board may be used instead. Before the manufacturer's gap is closed glue is put on an area on each of the side wall portions for its full length at which the end tabs of the lateral partition strips are to be fixed to the side wall portions.

The interior assembly of Exhibit 4, being the filler structure referred to in the specification, may now be described. It consists of mutually transverse partition members that define article receiving compartments, that is to say, cells for holding the beer bottles or other articles separate from one another. One of the partition members is described in the specification as the handle member and the others of which there are five, are called the filler members. In the evidence the handle member was usually referred to as the longitudinal partition or divider by reason of the fact that it runs the length of the carton and divides the dozen cells into two rows of six cells each. The filler members were referred to in various terms, most frequently as the transverse dividers. They are lateral partitions transverse to the longitudinal partition. The handle member includes a hand grip and a wall portion in which there are vertical slots through which the lateral partitions pass, the slots being considerably longer than the vertical dimensions of the lateral partitions, each slot having an offset edge which projects beyond the normal plane of the handle member. The lateral partitions are made of strips of material which are creased to define end tabs which are bent only when the carton is opened into box form. Each lateral partition strip

has a V-shaped notch at the centre of its top and a gap at the bottom of the notch. This V-shaped notch with the gap UNIPAR CARat its bottom was sometimes referred to as a Y-shaped notch. The end tabs are coated with glue so that when they are laid down upon or come in contact with the glued areas of the side wall portions previously referred to and the proper parts are pressed together a proper bond will be Thorson P. formed.

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The assembly of Exhibit 4 involves several operations. The lateral partition strips are laid on the side wall portion of the blank near its left end in an overlapping arrangement with their end tabs bent and lying on the glued area. The free ends of the lateral portion strips, which are also creased to provide end tabs, are extended to the right and slightly elevated. The handle member is then laid down on the lateral strips with the offset edges of the slots of its wall portion extending diagonally so that as it is moved to the left the free end of each lateral partition strip is threaded into and made to pass through its corresponding slot. The upper end of the hand grip portion of the handle member will then be above the upper limit of the side wall portion but may be aligned with it by moving the handle member so that the upper edges of the vertical slots will enter the corresponding V-shaped notches of the lateral partition strips and be lodged in the gaps below the V. The side wall portion of the blank carton at its right is then folded over so that its glued area is over the free end tabs of the lateral partition strips and the end wall portion at the left of the carton blank is then folded over the glued end tab of the said side wall portion. The knock down carton is then subjected to pressure in order to bind all the glued parts to their counterparts.

The carton is sold in this knock down form. The purchaser opens it up to a rectangular form and closes the bottom by folding the bottom end and side flaps. These are sealed by glue or tapes. The carton is then filled, the top is closed by folding the top and side flaps and the top is then sealed with a glued tape.

The purchaser of the filled carton slits the tape, inserts a finger through the finger gap and lifts up the handle member until the lower edges of its slots engage the under edges of the lateral partitions. He is then able to carry the carton and its contents.

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The fact that the vertical slots in the wall portion of UNIPAR CAR the handle member are longer than the vertical dimensions of the lateral partitions enables the handle member to move from its retracted position in which all of it lies below the top closure of the carton to its operative position in which the hand grip portion of the handle member projects above the top closure of the carton so that it and its contents can be carried. And the fact that the end tabs of the lateral partitions are glued to the side walls of the carton and are thus fixed to its wall structure enables the lateral partition members to cooperate with the handle member when it is in its operative position to limit the movement of the handle member outward of the wall structure or, in other words, to prevent it from coming out of the carton when it is being carried.

Thus the invention accomplishes the objects sought to be achieved. The evidence establishes that Exhibit 4 was a great improvement over the beer cartons previously in use and substantially solved the problems involved in their use. Evidence of the state of the prior art, the problems to be solved and the manner of their solution by the use of Exhibit 4 was given for the plaintiff by Mr. N. J. Macdonald, its general manager, and Mr. J. B. Treloar of Sommerville Limited of London, Ontario, one of its licensees.

I accept the evidence of these witnesses on the subjects mentioned and now summarize it. The first pack used by the breweries was a flat one. The full beer bottles were enclosed in paper sleeves and laid on their sides in the pack in two rows of six bottles each, one row on top of the other. There were serious disadvantages in its use. In the first place, two separate sources of supply were necessary, the packs being secured from one and the sleeves from another. At the brewery there were several problems. The filled bottles came from the bottle filling equipment on a conveyor belt in a single file and men were stationed on each side of it to put the sleeves on the bottles. Lower down men on each side of the belt placed the bottles on their sides in the pack and then sealed it. The process was slow and expensive because of the labor cost involved. When the cartons came back for re-use either the bottles had no sleeves and there was a risk of breakage or they had sleeves and there was labor and waste in taking them off. The consumer found the pack awkward to carry by reason of its not having a handle and he had the problem of dis-UNIPAK CABposing of the sleeves or of putting them back on the bottles. In addition, there was the risk of contamination of the beer by reason of the bottles lying flat and the beer touching the metal of the bottle cap. The pack did not lend itself to automatic packing and the breweries were anxious to Thorson P. be free from its use. They wanted greater production and less labor cost.

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In Eastern Canada upright 3×4 cartons with loose dividers were in use. Since these had two components their use created a storage problem in the brewery. There was also a labor problem. The carton had to be opened by hand, the bottom secured and the loose dividers assembled and placed in the carton. And while automatic packing could be used there was a tendency to misalignment of the partitions because of the loose dividers and a consequent hang-up in the packing with a risk of breakage. Moreover, the consumer did not like the carton. It had no handle and was bulky and awkward to carry.

In February, 1953, the plaintiff was incorporated under the laws of British Columbia and acquired a right to a 3×4 upright carton with glued-in dividers, which Steve Pasjack had designed. While it was getting its plant ready to produce this carton the breweries in the Vancouver area had already obtained 3×4 cartons with loose dividers and when the plaintiff had produced some of its cartons it could not sell them. The breweries wanted a carton that could be carried.

The plaintiff then discontinued work on its 3×4 carton and Steve Pasjack worked on and finally produced a 2×6 carton with glued-in partitions and a movable handle.

In the meantime, a 2×6 carton with loose dividers and without a handle had appeared in the Vancouver area. It was even worse than the 3×4 carton so far as hang-ups were concerned. The only contact the longitudinal divider had with the transverse dividers was on the longitudinal divider itself so that the dividers could easily become misaligned and this actually happened.

In Eastern Canada a 2×6 carton of a different kind came into extensive use. It was covered by Canadian Letters Patent Number 462,374, dated January 10, 1950, and issued to John W. Kidd. It was commonly known as the Kidd

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carton and sometimes called the Labatt carton. It had an UNIPAR CAR- interior assembly consisting of a longitudinal handle member and five lateral members all loose. There were three types of this carton. In the first one the top end and side flaps were turned down and the side flaps glued to the end ones. When the customer lifted the handle its shoulders Thorson P. bore against the under sides of the glued-down end flaps and he was able to carry the carton and its contents. But when he wished to return the empties he had to tuck the top end flaps down in order to keep the shoulders of the handle in place. In the second type, exemplified by Exhibits 8 and 8A, the top side flaps were equipped with elliptical extensions at their ends. The top end flaps were turned down at the brewery and the top was closed by gluing the extensions to one another. The customer could carry the filled carton because the turned-down top end flaps engaged the shoulders of the handle and prevented it from coming out of the carton. When he opened the carton he had to turn up the end flaps to get at the bottles in the end cells and when he wished to return the empties he had to tuck the end flaps down again. The third type was similar in principle to the first. The Kidd carton, even although equipped with a handle, had several disadvantages. Its price was higher than the breweries wanted to pay and its use in the brewery created several problems. One was that of multiple storage of the component parts and another the high labor cost of putting the loose assembly together and into the carton. Since the dividers were loose they could flop around and thus cause hang-ups in the automatic packing. Moreover, if the top end flaps, which were turned down either at the brewery or by the customer to return empties, became disengaged the whole interior assembly pulled out with resulting bottle breakage.

The 2×6 carton with the glued-in partitions and movable handle produced by Steve Pasjack was ready for the market in September, 1953, and met with immediate acceptance. Two of the Vancouver breweries, the Vancouver Brewery and the Sick's Capilano Brewery, used it exclusively. It solved many of the problems referred to. The interior assembly was self-aligning and the carton, therefore, lent itself to automatic packing. And the customer found it handy to carry and return with empties. But it was difficult to make and costly. The plaintiff was tied to a price of \$110 per thousand and in an effort to reduce the cost of production it cheapened the material. The result was that UNIDAK CABthe handle was too weak so that it tended to break and cause the loaded carton to fall. The breweries complained of this weakness and on November 26, 1953, the plaintiff shut down its machines until the difficulty could be solved.

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Then early in December, 1953, Steve Pasjack came up Thorson P. with a carton of the type of Exhibit 4. It was first produced on December 17, 1953, and first sold on the following day at the price of \$110 per thousand. The breweries that had purchased the plaintiff's first 2×6 carton felt that the new one solved all their problems and used it exclusively. Eventually, the Lucky Lager Brewery at New Westminster also purchased it as from November 29, 1954, so that by then the plaintiff had all the dozen bottle carton business of the Vancouver area breweries. It also supplied the needs of other breweries, such as those at Fernie, Princeton and Revelstoke in British Columbia and Red Deer in Alberta.

Exhibit 4 had many advantages over the beer cartons previously in use. From the manufacturer's point of view it used less material and was easier to produce than the previous 2×6 carton. It lent itself to manufacture with either corrugated paper or fibreboard. In the brewery it reduced labor cost. And the presence of the handle in its retracted position enabled the filled carton to be palletized and conveniently stacked with a saving of storage space. The carton also lent itself readily to automatic packing. The problem of hang-ups was solved. The consumer found it an easy one to carry and it was convenient for the return of the empty bottles.

The plaintiff continued to hold the whole of the dozen carton business of all the three breweries in the Vancouver area until the defendant produced the cartons of which the plaintiff now complains and cut their price down to \$100.50 per thousand.

There is thus no doubt about the utility of Exhibit 4. Nevertheless, the plaintiff continued to improve it. In February, 1954, it obtained the services of Dr. C. G. Lemon as a consultant and he set himself the task of making improvements. He strengthened the handle of Exhibit 4 and then developed the idea of making the interior assembly, apart from the handle member, out of one piece of material with lateral wings struck out from the sides of a

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longitudinal so-called envelope from which the grip portion UNIPAK CAR of the movable handle member emerged. This carton, a sample of which was filed as Exhibit 22, was shown by Dr. Lemon to Mr. Macdonald sometime before August, 1954. It was not put into immediate use but was shelved in September, 1954 for future use. It led to the filing of a Thorson P. patent application by Dr. Lemon which is still pending. The relations between Steve Pasiack and Dr. Lemon became strained and Steve Pasjack left the plaintiff's employ in May, 1955, and subsequently entered into contractual relationship with the defendant. In view of the fact that a beer carton of the type of Exhibit 22 is involved in conflict proceedings between the parties now pending in this Court I do not describe Exhibit 22 further. But a brief reference to improvements in the centering means on the lateral partitions of Exhibit 4 will not be amiss. There were some complaints from the breweries about the lack of centering of the longitudinal handle member and an improvement in the centering means was devised. At the bottom of the gap below the V-shaped notch or, to put it otherwise, at the bottom of the foot of the Y-shaped notch there was a lateral cut above which there was a bendable tab on each side of the leg of the Y and above the lateral cut. This enabled the longitudinal handle member to enter into the gap between the tabs and be gripped by them. This was an improvement, for the handle member was held more firmly. The plaintiff also decided to build a high speed machine for cutting the lateral partition strips more quickly and this machine was devised in such a way that it would cut the strips with the improved notch. A sample of a carton with this improved notch was filed as Exhibit 38. It came into use in 1954. Apart from this improvement in the notch and the strengthened handle member Exhibit 38 was the same as Exhibit 4. Another improvement in the centering means came in 1957. A new machine was built for an automatic assembly of the carton to take the place of the manual assembly of Exhibit 4 already described. It was found that the centering means provided in Exhibit 4 or Exhibit 38 did not lend itself to the contemplated automatic assembly and a new centering means had to be devised. The top notch of the lateral partition strip was made wider but the gap at the bottom of the notch and the bendable tabs as in Exhibit 38 were eliminated. In their stead a gap with

bendable tabs on each side of it was cut at the centre of the bottom of the lateral strip opposite the centre of the UNIDAK CABnotch at the top. The two outside slots of the longitudinal handle member were also cut differently so that the handle member could enter the gap at the bottom and be locked. This method of locking the handle member lent itself to the automatic assembly process. A new machine was then built Thorson P. to cut the lateral partition strips with this new centering means so that the handle member could be locked in the course of the automatic assembly instead of having to be locked manually as was necessary in the case of Exhibits 4 and 38. It was now possible to accomplish the automatic assembly of the carton. A sample of a carton thus produced was filed as Exhibit H. Apart from the improvement in the centering means it was the same as Exhibit 38.

There were other improvements such as are exemplified by cartons of which samples were filed as Exhibit 29 and Exhibit 41 but these relate more particularly to Exhibit 22, the carton devised by Dr. Lemon, than to Exhibit 4 and. for the purposes of this case, need not be described. Cartons of the type of Exhibit 38 and Exhibit H may fairly be referred to as Exhibit 4 type cartons.

As already stated, the plaintiff continued to hold all the dozen bottle beer carton business of the three Vancouver area breweries until after the defendant had produced a beer carton, similar in principle to Exhibit 4. A sample of this was filed as Exhibit 12. Cartons of this type will be referred to simply as Exhibit 12 or Exhibit 12 type cartons. Exhibit 12 was first offered to the breweries early in the summer of 1956 at \$100.50 per thousand. The plaintiff could not meet this reduced price with the result that it lost to the defendant all the Vancouver area business that it had enjoyed and had to close down its plant in September of 1956.

The plaintiff intended to re-open after its patent situation was cleared. Steve Pasjack's application for a patent covering the Exhibit 4 type carton had been filed on June 9. 1954. Nothing happened to it until after the filing of a patent application by Joseph Vesak, an employee of the defendant. His application was filed on April 9, 1956. Then, on October 10, 1956, a conflict between the Pasjack and Vesak applications was declared by the Commissioner of Patents.

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Subsequently, the conflict proceedings were terminated UNIPAR CAR because of the fact that Vesak's application had been filed more than two years after Exhibit 4 had come on the market. It is not necessary to deal with this matter further than to say that in the course of the proceedings claims 1 and 2 in Vesak's application were awarded to the plaintiff and became claims 8 and 9 of the patent in suit when it finally issued on May 7, 1957. Then a patent was issued to the defendant as the assignee of Joseph Vesak covering features in his carton invention that were not present in Pasiack's.

> The delay in the issue of the patent in suit had caused a slow-down in negotiations between Sommerville Limited and the plaintiff for a license and these were not resumed until after the issue of the patent.

> The plaintiff then decided to re-open its plant before the issue of the patent and did so in February, 1957. It then offered Exhibit 4 in its improved form at \$100.50 per thousand. Then prior to the issue of the patent on May 7. 1957, the defendant had produced and offered to the breweries an improvement over Exhibit 4 or Exhibit 12, a sample of which was filed as Exhibit 13. Cartons of this sort will be referred to simply as Exhibit 13 or Exhibit 13 type cartons. This carton was offered to the breweries at \$100.50 per thousand in April of 1957 and was in continuous production and sale by the defendant after the date of the plaintiff's patent. Then on July 12, 1957, the plaintiff brought this action.

> Subsequently, the plaintiff issued licenses under the patent in suit and other patents and inventions claimed in pending applications to various concerns one of which was Sommerville Limited. The license to it was issued on December 5, 1957. Subsequently, the plaintiff decided that its production operation at Vancouver was uneconomical and it closed its plant. Since then its activities have been confined to issuing licenses and receiving royalties.

> It is alleged in the plaintiff's amended particulars of breach that the defendant infringed the patent in suit by the manufacture and sale of cartons. The cartons in question are of two types, one being referred to as Exhibit 12 and the other as Exhibit 13.

> Although the defendant has challenged the validity of the plaintiff's patent it will be convenient to deal with the

issues of infringement first, but before I do so I should set out the claims in suit. According to the amended pleadings UNIPAK CARthese are claims 1, 2, 4, 5, 6, 7, 8 and 9 with respect to Exhibit 12 and claims 1, 4, 5, 6 and 7 with respect to Exhibit 13. The said claims are as follows:

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- 1. An enclosed carton of the type having a wall structure comprising side and end walls and a bottom, said carton including a top closure. Thorson P. and mutually transverse partition members defining article receiving compartments therein, and in which one such selected partition member includes a handle portion and is movable between a first retracted position in which said handle portion lies beneath said top closure and a second operative position in which said handle portion projects above said top closure, wherein at least one other of such partition members is fixed to the wall structure and co-operates with said selected partition member to limit movement thereof outward of such wall structure.
- 2. An enclosed carton of the type having a wall structure comprising side and end walls and a bottom, said carton including a top closure, and mutually transverse partition members defining article receiving compartments therein, and in which one such selected partition member includes a handle portion and is movable between a first retracted position in which said handle portion lies beneath said top closure, and a second operative position in which said handle portion projects above said top closure, and shoulders on said handle portion co-operate with the underside of said top closure to limit further outward movement of such selected partition member, wherein at least one other of such partition members is fixed to the wall structure and co-operates with said selected partition member to limit movement thereof outward of such wall structure after displacement of said top closure from co-operating relationship with said shoulders.
- 4. An enclosed carton as claimed in Claims 1 or 2 wherein means are provided for locating said selected partition member in relation to said one other of such partition members.
- 5. An enclosed carton as claimed in Claims 1 or 2 wherein said selected partition member is provided with an extension forming a grip extending, when said selected partition member is in its first retracted position, to the height of the wall structure.
- 6. An enclosed carton as claimed in Claims 1 or 2 wherein the top closure includes a first pair of top flaps and a second pair of top flaps which are arranged at right angles to, and adapted to overlie, the first mentioned pair of top flaps, said second pair of top flaps meeting, when closed, adjacent the centre of the carton and adapted to be held in closed position by means of a glued tape.
- 7. An enclosed carton as claimed in Claims 1 or 2 wherein said selected partition member is provided with an extension forming a grip extending, when said selected partition member is in its first retracted position, to the height of the wall structure and wherein the top closure includes a first pair of top flaps and a second pair of top flaps which are arranged at right angles to, and adapted to overlie, the first mentioned pair of top flaps, said second pair of top flaps meeting, when closed, adjacent the centre of the carton and adapted to be held in closed position by means of a glued tape, said second pair of top flaps being recessed intermediate the length of their meeting edges to provide an elongated aperture

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through which the grip of said selected partition member may be withdrawn so as to move said selected partition member to its second operative position.

- 8. A carrier carton comprising a case having side and end walls, a top and a bottom, a plurality of spaced transverse partitions secured at the ends thereof to the side walls, a longitudinal partition extending longitudinally of the case and having slots therein through which the transverse partitions extend, said longitudinal partition being movable vertically relative to the transverse partitions and said partitions dividing the case into cells, means coacting with the longitudinal and transverse partitions to prevent movement of at least a part of the longitudinal partition laterally of the case, means to limit the upward movement of the longitudinal partition, and a handle connected to the top of and movable with the longitudinal partition and extending upwardly therefrom, said handle being completely in the case when the longitudinal partition is near the bottom thereof and being movable in a position projecting above the case top.
- 9. A carrier carton as claimed in Claim 8 in which the handle is provided with shoulders projecting from the ends thereof that when the handle is moved upwardly engage the closed case top to stop the movement of the longitudinal partition.

The commercial magnitude of the issues involved in this case is indicated by the fact that Sommerville Limited, one of the plaintiff's licensees, sells from three and a half to four million cartons per year to Labatt's brewery and from seven to eight million cartons per year to Carling's.

The charge that the defendant infringed the claims in suit by the manufacture and sale of Exhibit 12 presents no difficulty. It is without support and I have no hesitation in dismissing it. But before I set out the evidence relating to the matter I should refer to the manner in which this particular issue arose and the pleadings to which it gave rise. It is clear that it was understood between counsel long before the date of the trial that Exhibit 12 need not be considered unless counsel for the plaintiff advised counsel for the defendant otherwise and the preparation of the case proceeded on that understanding until just shortly before the date of the trial. It was not until then that counsel for the defendant was advised that Exhibit 12 as well as Exhibit 13 would be in issue. Then on the opening of the trial leave was given to counsel for the plaintiff to amend its particulars of breaches accordingly although, strictly speaking, such leave was unnecessary. Then, consequentially and also pursuant to leave, counsel for the defendant amended its statement of defence by alleging, in effect, that if the defendant sold any Exhibit 12 type cartons after May 7, 1957, such sales were of cartons manufactured prior to such

date and the defendant, under section 58 of the Patent Act, R.S.C. 1952 Chapter 203, was not liable for infringe-Unipak Carment in respect thereof. Then counsel for the plaintiff, pursuant to leave given after strong objection by counsel for the defendant, filed a reply to the amended statement of defence alleging that in equity the defendant was precluded from relying on section 58 of the Act by reason of Thorson P. the fact, in effect, that in the course of Vesak's patent application it had made or caused to be made representations to the Patent Office that were intended to be acted upon by it so that a conflict would be declared which was calculated to delay, and did delay, the issue of the plaintiff's patent and that such representations were untrue and were known or should have been known by the defendant to be untrue, and, in the alternative, that they were made recklessly without regard to their truth. This was plainly a charge that the defendant had been guilty of fraud and had thereby disentitled itself to any exemption from liability under section 58 of the Act.

Whether a defendant has infringed the plaintiff's patent is a question of fact and the onus of proof of the alleged infringement is on the plaintiff. In the present case it is admitted that Exhibit 12 comes within the terms of claim 1 of the patent in suit and there is no doubt that it comes within the terms of claims 8 and 9. It is, therefore, not necessary to describe Exhibit 12 or set out the differences between it and Exhibit 4 which warranted the issue of a patent to the defendant covering the features of Exhibit 12 that were not present in Exhibit 4.

The evidence is that Joseph Vesak designed Exhibit 12 late in July or early in August of 1953, that he was responsible for its production and that it went into commercial production early in July of 1956. But there was no evidence that could possibly warrant a finding that the defendant manufactured it after May 7, 1957. Indeed, the evidence is conclusive that it stopped producing it on May 3, 1957, made preparations on the following day, being Saturday, May 4, 1957, for the production of its new carton, Exhibit 13, and commenced its actual production on May 6, 1957. The evidence of Mr. B. Gourlay, the defendant's director of economic planning, taken from his examination for discovery as an officer of the defendant and put in by counsel for the defendant under the authority of the General Rules

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and Orders of this Court, was that Exhibit 12 was produced UNIPAR CAR by the defendant from July 9, 1956, to May 3, 1957, and that it stopped producing it on the latter date. There was also the positive statement of Mr. G. R. Sharpe, the defendant's box plant manager, that it stopped making Exhibit 12 on Friday, May 3, 1957, and began the produc-Thorson P. tion of Exhibit 13 on May 6, 1957, and that Exhibits 12 and 13 were not in commercial production simultaneously.

It was also shown by the defendant's weekly letters, filed as Exhibit Z-11, that the defendant had made plans that the production of its new carton should commence on May 6, 1957, and that no partitions or handles for the old carton should then be on hand. These plans were carried out. The weekly letter of May 17, 1957, states that the defendant "began production of the new beer box May 6th, on schedule," and the production record of the defendant's glue applicator No. 462 for May 6, 1957, being part of Exhibit 83, filed by counsel for the plaintiff, shows that on that date girls were being trained for and working on the new boxes. It was proved that the partitions that were glued into Exhibit 12 were made on a machine called the Inman machine. Counsel for the plaintiff filed the production record of the defendant's Inman partition machine No. 575 for May 1, 1957. This shows that on that day 20,300 partitions were piled in boxes. There was no evidence of any production of Inman machine partitions after that date. Indeed, Mr. Sharpe stated positively that on May 3, 1957 there were no old style or partition assemblies for the old box design left on hand. That being so, the defendant could not manufacture Exhibit 12 after May 3, 1957.

Notwithstanding this clear evidence counsel for the plaintiff contended that the defendant continued to produce Exhibit 12 after May 7, 1957. In support of his contention he relied on Exhibit 81 and Exhibit 82. The former shows, as already stated, that 20,300 Inman machine partitions were made and piled in boxes on May 1, 1957. Exhibit 82 was the production record of the defendant's glue applicator No. 462 for May 11, 1957, and it shows that 12,125 cartons went through the glue applicator on that day. It is clear, of course, that the Inman machine partitions made on May 1, 1957, were intended for use in the production of Exhibit 12 type cartons. At that date the only cartons being produced by the defendant were cartons of that type. Both

Exhibit 81 and Exhibit 82 showed production under the same order number, namely, Order 8342 A-41 and counsel UNIDAK CABbased his whole case on that fact. His argument, in effect, was that since Exhibit 12 type cartons were being used prior to May 7, 1957, to supply Order 8342 A-41 it was reasonable to assume that when that number appeared on a production record after that date Exhibit 12 was still being produced. It was, accordingly, submitted that the partitions that were glued in to the 12.125 cartons on May 11, 1957, as shown by Exhibit 82, came out of the 20,300 Inman machine partitions that were piled in boxes on May 1, 1957, as shown by Exhibit 81, and it was argued that a prima facie case had thus been made that Exhibit 12 type cartons were produced on May 11, 1957.

There is no warrant for counsel's assumption. It was nothing more than conjecture on his part. While Exhibit 81 shows that 20,300 Inman machine partitions were piled in boxes on May 1, 1957, there is no record of how many were left at the end of the day. Mr. Sharpe stated that when a box was filled with partitions it was taken immediately to the glue applicator and the production records for it. filed as Exhibit Z-14, show that the beer lines were running on May 1, 1957, and that on that day partitions were glued into 26,975 cartons produced to supply Order 8342 A-41. I have already referred to Mr. Sharpe's positive statement that on May 3, 1957, there were no old style or partition assemblies for the old box design left on hand. And Mr. Sharpe emphatically denied that the defendant was producing Exhibit 12 on May 11, 1957. I accept his statement that, although the order number on Exhibit 82 was the same as that on Exhibit 81, the partitions used on May 11, 1957, were not the same as those made on May 1, 1957, and that they were not Inman machine partitions. Mr. Sharpe said that there could be a style change without a change being made in the order number.

Moreover, it appears from the production records of the defendant's glue applicator No. 462, filed as Exhibit Z-14, that on some days partitions were being glued into cartons to supply orders other than Order 8342 A-41 as well as to supply it. If counsel's assumption were sound this would mean that the defendant was producing both Exhibit 12 cartons and Exhibit 13 cartons on the glue applicator on the same day. Mr. Vesak's evidence is against such a possibility.

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He pointed out that the glue patterns on the two cartons UNDAK CAR were different and that the glue applicator could not be used to produce Exhibit 13 and then produce Exhibit 12, or vice versa, without making a change in the gluing plates. If there had been any such change it would have been noted in the production records and there is no such note.

> Finally, the fanciful nature of counsel's assumption is demonstrated by another fact. The production records for the defendant's glue applicator No. 462 for May 8, 9, 10, 13, 14, 15, 16, 21 and 22, 1957, all carry the same order number as the record for May 11, 1957, Exhibit 82 and show a total of 118.375 partitions glued into cartons produced to supply Order 8342 A-41. Consequently, if counsel's assumption were sound that the partitions glued into the 12,125 cartons produced on May 11, 1957, came out of the 20.300 Inman machine partitions that were piled in boxes on May 11, 1957, the same assumption would have to be made in respect of all the 118,375 partitions glued into cartons on the days mentioned, an assumption that would be patently absurd.

> Infringement cannot be established by conjecture of this sort. There must be proof of it. In my opinion, there was no evidence that the defendant manufactured any Exhibit 12 type cartons after May 7, 1957. Indeed, the evidence is overwhelmingly to the contrary and I so find.

> I am also of the opinion that there is no credible evidence that the defendant sold any Exhibit 12 type cartons after May 7, 1957. On the last day of the trial counsel for the plaintiff put in the following questions and answers from Mr. Gourlay's examination for discovery:

- 131. Q. Now, is that carton, Exhibit No. 2, the only carton being sold by the defendant company in the twelve-bottle size?
 - A. Yes.
- 132. Q. Has it been the only carton you have been selling since May 7, 1956? Well, when I put that—other than the remaining run that there was of Exhibit 1?
 - A. That is right.
- 133. Q. Which you sold off?
 - A. Yes.

It was agreed that Exhibit 2 on the examination for discovery was the same as Exhibit 13 at the trial and that Exhibit 1 was the same as Exhibit 12. Counsel for the plaintiff relied on Mr. Gourlay's statement as an admission of the sale of Exhibit 12 type cartons after May 6, 1957.

It is significant that counsel thought so little of this evidence that he did not put it in during the plaintiff's case. UNIPAK CAR-But quite apart from that, it would not be proper to regard this as proof of sales after May 7, 1957. The statement should be considered together with the questions and answers from the examination for discovery put in by counsel for the defendant in the course of which, in Thorson P. response to counsel's question as to the date from which Exhibit 12 type cartons were sold, Mr. Gourlay said that they were sold from July 9, 1956, to May 3, 1957, and then corrected himself and said that he did not know the answer to counsel's question and could not answer it and that he was not sure of the date of the last sales of that particular carton. How then could it fairly be said that he admitted sales after May 7, 1957? In my opinion, he did not.

That being so it is not necessary to enquire whether the defendant was entitled to the benefit of section 58 of the Patent Act or the plaintiff's charge of fraud. But if it should be considered that Mr. Gourlay's statement was an admission of the sale of the remaining run of Exhibit 12 after May 7, 1957, there would be no reason why the defendant would not be entitled to the benefit of section 58 of the Act in respect of cartons produced before May 7, 1957, and sold afterwards. There is no evidence of any improper conduct on the part of the defendant in connection with Vesak's patent application or its prosecution. There was no proof that the application was filed for the purpose of delaying the issue of the plaintiff's patent and there was no evidence to warrant the charge of false representations levelled against the defendant. Indeed, counsel for the plaintiff failed to prove any act or conduct on the part of either the defendant or Joseph Vesak that would disentitle it to the relief that section 58 of the Act would have provided if the defendant had needed to rely on it.

The plaintiff has wholly failed in its charge that the defendant infringed any of the claims in suit by manufacturing or selling Exhibit 12 type cartons and to that extent its action must be dismissed. I should add that this issue unduly prolonged the trial. In my opinion, this could have been avoided if steps had been taken earlier for the production of documents relating to the manufacture and sale of Exhibit 12 type cartons after May 7, 1957, and examination for discovery thereon. Thus counsel for the defendant had

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good reason to complain of the lateness of the notification UNIPAK CAR to him that infringement by Exhibit 12 would be made an issue. Consequently, the defendant will be entitled to the costs properly attributable to the undue extension of the time of the trial to which I have referred. I shall deal further with this matter later.

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It is not as easy to determine whether the defendant has infringed the claims in suit by its manufacture and sale of Exhibit 13 type cartons. The answer to that question depends on the construction of the claims and whether Exhibit 13 comes within them. Before I construe the claims I should describe Exhibit 13. This will involve comparisons with Exhibit 4.

The wall structure of Exhibit 13 is similar to that of Exhibit 4. It has side and end walls and top and bottom closures consisting of top and bottom side and end flaps. It is all formed out of a single carton blank which is creased to form the side and end walls and the top and bottom side and end flaps. The carton blank is made of corrugated paper board instead of fibreboard as in the case of Exhibit 4. The top closure is only slightly different from that of Exhibit 4. Instead of having a recess cut back from the centre of each top side flap to enable the hand grip portion of the handle member to come through it when the handle member is pulled up to its operative position as in the case of Exhibit 4, the top side flaps are cut so that when they are folded down they do not quite meet thus leaving a slight gap between them for the whole length of the carton. It is through this gap that the hand grip portion of the handle member emerges above the top of the carton when the handle member is pulled up to its operative position. At the centre of each top side flap there is a finger drop like that in Exhibit 4. And, as in the case of Exhibit 4, the free end of the side wall portion of the carton blank at one end of it is equipped with a creased tab which is glued to the end wall portion at the other end when it is folded over at the manufacturer's gap. So far Exhibit 13 is very like Exhibit 4.

The interior assembly of Exhibit 13 is different from that of Exhibit 4. It has a movable handle member extending the full length of the carton. As in the case of Exhibit 4, this movable handle has a hand grip portion and a wall portion, the hand grip portion extending centrally above the wall

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portion. In the evidence the sections of the wall portion on each side of the hand grip portion were referred to as the UNIPAK CABshoulders of the handle member. The wall portion differed from that in Exhibit 4 in that it had no slots in it. The rest of the interior assembly, other than the handle member, is formed out of one piece of material called liner paper, which has been folded along its centre to make, in a sense, two Thorson P. sides which extend downward in the carton and so disposed that they are in the centre of the carton. In the evidence this folded member was referred to as the envelope. A slot is cut in the centre of the fold, slightly longer than the length of the hand grip portion of the handle member, to permit the hand grip portion to come through it when the handle member, which is enclosed within the two sides of the envelope, is pulled up to its operative position. In the evidence the portions of the top of the envelope on each side of the central slot were called its shoulders. At each end of the envelope there are two tabs which are glued to the end wall adjacent to it, the first from near the top of one side of the envelope being glued to the portion of the end wall between such side and the side wall of the carton and the second from the bottom portion of the other side of the envelope being glued to the same portion of the end wall as the first and immediately below it. In this manner the envelope is maintained in its central position for the length of the carton and is fixed at its ends to the end walls of the carton.

There are no separate lateral partitions in Exhibit 13 such as those in Exhibit 4. Instead, slits are cut in each side of the envelope to form five wings extending outwardly from it. These are bent at their ends to form tabs which are glued to the adjacent side wall of the carton. The tab at the end of the wing farthest to the left is wider than the others. The slits are cut so that the wings do not extend all the way down to the bottom of the carton or all the way up to the top. There is a strip below the wings and connected to the end tabs, which is also glued to the adjacent side wall of the carton. Thus the interior assembly of Exhibit 13 is fixed to the wall structure of the carton at more areas of attachment than in the case of Exhibit 4. namely, by the tabs of the five wings and the strip below them to each side wall and by the two tabs of the ends of the sides of the envelope to each end wall.

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As in the case of Exhibit 4, Exhibit 13 is sold to the UNIPAK CAR- breweries in a knock-down form, the handle member having been inserted between the two sides of the envelope and the rest of the assembly disposed on the carton blank so that the various tabs and strips meet their appropriate glued areas and will be bonded to them when the blank is Thorson P. folded and the whole is run through the pressing machine. When Exhibit 13 is opened up to its rectangular box form it will be seen that the wings formed from each side of the envelope extend from it to the adjacent side wall of the carton at right angles to the side of the envelope on the one hand and the side wall of the carton to which the end tab of the wings and the strip below them are glued on the other.

> When the handle member is in its lower or retracted position the top of its hand grip portion is even with the top of the envelope and the wall portion goes down to the bottom of the carton. In this position it separates the two rows of bottles from each other and is thus a longitudinal divider or partition. The wings, which do not go all the way to the bottom of the carton or extend all the way to the top of the side of the envelope from which they extend, separate the bottles in the row from one another and are thus lateral dividers or partitions. The wings on one side of the envelope have corresponding wings on the other side. In the manner described the handle member and the rest of the assembly form cells for the bottles or other articles to be carried so that, in the words of Claim 1, they define article receiving compartments. The portions of the sides of the envelope above the wings also help to keep the rows of bottles separate from each other.

> When the handle member is pulled up by the hand grip portion to enable the customer to carry the carton and its contents it moves upward from its lower or retracted position, in which it is all below the top closure of the carton, to its upper or operative position, in which the hand grip portion emerges through the slot cut in the centre of the fold of the envelope and projects above the top closure. When the handle member is in this operative position its shoulders engage the under sides of the shoulders of the envelope so that the handle member cannot go up any further. It is this co-operation with the handle member by the rest of the interior assembly that limits the movement

of the handle member outward of the wall structure of the carton or, in other words, prevents it from coming out of UNIPAK CARthe box.

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In this description of Exhibit 13 I have used the word envelope because that term was used by the witnesses. Strictly speaking, as will appear later, the term is not correct. It would have been better to use the term "so-called Thorson P. envelope".

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I now proceed to the construction of the claims in suit. This must be done in order to ascertain what the invention defined by them is. Since a patent specification, which includes the claims, is addressed to persons skilled in the art to which the invention relates, the claims should be read in the light of the common knowledge which such persons are assumed to have. Consequently, if the Court is to construe the claims properly it must, as far as possible, be put in the same position as such persons would be. Ordinarily, this purpose is sought to be accomplished with the aid of expert evidence on such matters as the state of the art at the date of the patent, the meaning of technical terms and terms of art and the working of the invention. But there are cases in which the claims are expressed in such plain and common language that the Court can construe them and ascertain the invention defined by them without any aid beyond the language used in formulating them.

In my opinion, Claim 1 is a claim of this nature. Thus its construction is free from difficulty. It defines an invention of a carton comprising specified elements that function in a specified manner to accomplish a specified purpose. The carton is enclosed and is of the type that has a wall structure comprising side and end walls and a bottom. It includes a top closure and mutually transverse partition members defining article receiving compartments in the carton. It is clear that at least two partition members are contemplated. These have the characteristic of being mutually transverse and they perform the function of defining article receiving compartments in the carton. The claim does not specify the shape of the carton or the arrangement or number of the compartments. So long as there is one partition member that is transverse to another partition member, or to other partition members, and the partition members define article receiving compartments in the carton the requirements of the claim are met, so that a 2×2 carton or a 2×3 carton or

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a 2×6 carton would each be within the claim if otherwise UNIPAK CAR- qualified. If one partition member is styled the longitudinal partition because it runs lengthwise of the carton the other partition member, or partition members, being at right angles and also transverse to the longitudinal partition may be styled the lateral partition, or the lateral partitions. Since Thorson P. it is specified that the mutually transverse partition members perform the function of defining article receiving compartments in the carton or, in other words, forming cells for the reception of bottles or other articles it follows in the case of a carton for twelve bottles that the longitudinal partition separates the rows of six bottles from each other, in which case it serves as a longitudinal divider, and the lateral partitions separate the bottles in the row from one another, in which case they serve as transverse or lateral dividers. One of the mutually transverse partition members is described as "such selected partition member" but what is plainly meant is "a selected one of such mutually transverse partition members". This selected partition member has two characteristics, namely, it includes a handle portion and it is movable between two defined positions, the first being a retracted one in which the handle portion lies beneath the top closure of the carton and the second an operative one in which the handle portion projects above the top closure. The use of the term "operative" implies that when the selected partition member is moved from its retracted position, which is its lower one, to its operative position, which is its higher one, it will have an operative effect, namely, that it will operate so that the carton can be lifted by the handle portion of the selected partition member if the other specifications in the claim are complied with. The claim next refers to "at least one other of such partition members." This means at least one of the mutually transverse partition members; that is, other than the selected partition member. This other partition member has a specified relationship to the wall structure of the carton and performs a specified function. It is fixed to the wall structure of the carton, which has been defined earlier in the claim as comprising side and end walls and a bottom, so that it may be fixed to any one of these portions of the wall structure. The partition member thus fixed to the wall structure may be described as the fixed partition member to distinguish it

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from the selected member which is movable. This fixed partition member has a specified function namely, that it UNIPAK CARco-operates with the selected partition member, the handle member, to limit its movement outward of the wall structure or, in other words, to prevent it from coming out of the carton when it is lifted up to be carried. It is clear that the limitation of movement referred to is accomplished Thorson P. solely by the specified co-operation. As I see the claim it defines a combination in which there are specified elements so arranged as to form cells for receiving the bottles or other articles to be carried and co-operating in a specified manner to accomplish a specified purpose thus producing a simple and unitary result, namely, a carton equipped with a movable handle by which it can be carried without the handle coming out of it. Thus the invention defined in the claim has the unitary result that is necessary to distinguish a combination from an aggregation of elements.

I now come to the question whether Exhibit 13 is within Claim 1. Since there is no doubt that Exhibit 4 embodies the invention defined in the claim it will be convenient to compare Exhibit 13 with it. It is manifest, of course, that Exhibit 13 is an improvement over Exhibit 4 but that does not eliminate the possibility that it is an infringement. It is established law that an improvement may be an infringement: vide the general statement to that effect of Lindley L. J. in The Wenham Gas Company, Ld. v. The Champion Gas Lamp Company and the particular one of Bowen L.J., at page 56:

if the pith and marrow of the invention is taken it is no excuse to say that you have added something, or omitted something, even if the addition or omission be useful and valuable. The superadding of ingenuity to a robbery does not make the operation justifiable.

Thus the fact that Exhibit 13 is a stronger carton than Exhibit 4 and has advantages over it does not free the defendant from liability for infringement if Exhibit 13, apart from its superiority over Exhibit 4, comes within the claim: Vide Riddell v. Patrick Harrison & Co. Ltd.2 And this would be so even if Exhibit 13 were a patentable improvement: vide Lightning Fastener Co., Ltd. v. Colonial Co. Ltd. et al.3

² (1957-58) 17 Fox P.C. 83 at 108. 1 (1892) 9 R.P.C. 49 at 55. 3 [1932] Ex. C.R. 89 at 100.

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Nor does the fact that there are differences between UNIPAR CAR- Exhibit 13 and Exhibit 4 determine the matter. The question is whether the terms of the claim are met in Exhibit 13, notwithstanding such differences.

> Exhibit 13 is an enclosed carton of the type that has a wall structure comprising side and end walls and a bottom and it includes a top closure. Thus far, it is within the terms of the claim. The next question is whether it includes mutually transverse partition members defining article receiving compartments in the carton. There was no dispute that Exhibit 4 includes such members and that they perform the function specified but it was strongly denied by counsel for the defendant that these requirements of the claim are met in Exhibit 13. Here it seems to me essential to ascertain the meanings of the word "transverse" and the term "mutually transverse". The Shorter Oxford English Dictionary defines "transverse", when used as an adjective, as follows:

> 1. Lying across; situated or lying crosswise or athwart; esp. situated or extending across the length of something, spec. at right angles 1621.

> The same dictionary defines "across", when used as an adverb, as follows:

> 1. In the form of a cross, crosswise, crossing 1480. 2. Crossing the length-line, transversely; through 1523

and "athwart", when used as an adverb, as follows:

1. Across from side to side, transversely; usu. in an oblique direction 1611. Naut. from side to side of a ship 1762, 2. Across the course (of any thing) 1594;

The word "mutually" is the adverb of the adjective "mutual" which the same dictionary defines as follows:

1. Of relations, feelings, actions: Possessed, entertained, or done by each other towards or with regard to the other; reciprocal.

Thus one partition member cannot be transverse to another merely by being at right angles to it. It must lie across or be situated or lie crosswise of or athwart it or be situated or extend across its length. And two partition members cannot be mutually transverse unless each lies across the other or is situated or lies crosswise of or athwart it or is situated or extends across its length. The relationship between the two partition members must be a reciprocal one. Put simply, they must cross one another. In Exhibit 4 there is a longitudinal partition member, namely, the handle member, consisting of the hand grip portion and the wall portion, run-UNIPAK CARning lengthwise of the carton and five lateral partition members extending from one side wall of the carton to the other. Crown Zellerbach The longitudinal partition member extends across the length of each of the lateral partition members at its centre and is thus transverse to each of them. And each lateral parti- Thorson P. tion member extends across the length of the longitudinal partition member by passing through the appropriate slot in its wall portion and is thus transverse to it. Thus there are mutually transverse partition members in Exhibit 4. It is clear that the longitudinal partition member, the handle member, separates the rows of six bottles from each other and that the lateral partition members separate the bottles in the row from one another so that in their totality these mutually transverse partition members define article receiving compartments in the carton.

But, as pointed out in the description of Exhibit 13, its interior assembly is different from that of Exhibit 4. It has only two members in it, instead of six as in Exhibit 4, namely, the handle member and the rest of the interior assembly consisting of a single piece of material disposed as described. It will, therefore, be convenient to refer to the two members respectively as the handle member and the other member.

Counsel for the defendant, taking a different position in the argument from that taken in his opening, conceded that the handle member is a partition member. This was proper for it is clearly so. When it is in its lower or retracted position it goes all the way down to the bottom of the carton and separates the rows of bottles from each other thus performing its appropriate part in the function of defining article receiving compartments in the carton. Since it runs the length of the carton it may, like the handle member in Exhibit 4, be called the longitudinal partition member.

The determination of the nature and function of the other member of Exhibit 13 is not as easy. In the course of the trial this other member was frequently referred to as the envelope and the wings extending outwardly from it were called the transverse dividers by the witnesses for the plaintiff and the lateral partitions by counsel for the defendant. With a view to proving that there are partition members in Exhibit 13 that are transverse to the handle

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member partition Mr. Macdonald and Mr. Treloar asserted UNDAK CAR- that the so-called envelope is an integral part of the transverse dividers. There were variations in this central theme. all sounding to the same effect. Counsel for the plaintiff contended, in effect, that there are transverse partitions in Exhibit 13 extending from one side wall of the carton to Thorson P. the other, consisting of the wings on one side of the envelope, their corresponding ones on the other side, the end tabs of each and the envelope connecting the pairs of wings. Counsel for the defendant disputed this contention. For reasons that will appear I need not further elaborate the respective contentions of counsel on this point.

> In my opinion, it makes for confusion to refer to the member other than the handle member as if it consists of several members, namely, the so-called envelope, the so-called lateral partitions and the tabs attaching them to the side walls. There is only one other member in Exhibit 13. Thus the inquiry is whether it and the handle member constitute mutually transverse partition members defining article receiving compartments within the meaning of claim 1. This raises several questions which I enumerate. Firstly, is this other member a partition member? Secondly, if it is, is it transverse to the longitudinal partition member, the handle member? Thirdly, if it is, are the two partition members mutually transverse partition members? And, fourthly, if they are, do they define article receiving compartments in the carton? I shall deal with these questions in their stated order. But before I do so I should refer to the description of this other member in order to ascertain its true nature and function. In this connection it will be helpful to look at the interior assembly of Exhibit 13, which was filed separately as Exhibit 14. This includes the handle member but, at the moment, I am not concerned with it but only with the rest of the interior assembly. When it is spread out the fact that it consists of a single undivided sheet of liner paper stands out. It will be seen that a slot has been cut in the centre of the sheet to allow the hand grip portion of the handle member to emerge through it when the handle member is lifted to its operative position and that the rest of the centre line on each side of the slot has been creased to enable the sheet to be folded at the crease to form two sides constituting the so-called envelope. It will also be seen that slits have been cut in each of the sides to form five

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wings, that each wing has a bent end tab to be glued to the adjacent side wall of the carton, that there is a strip below UNIDAK CARthe wings and connecting the end tabs also to be glued to the side wall, and that there are tabs at the end of each Zellerbach side of the so-called envelope that are to be glued to the adjacent end wall in the manner described. If Exhibit 13 is now looked at and opened up from its knock down form Thorson P. to its rectangular box one and the bottom end and side flaps folded it will be seen that the wings cut from each side of the so-called envelope extend outwardly from it-to the side wall of the carton and form lateral partitions at right angles to it and the side wall and that these will enable the bottles in each row to be separated from one another. Thus, it will be seen that this other member has been so disposed as to form partitions that perform their appropriate part in the function of defining article receiving compartments in the carton. That being so, the first question must be answered in the affirmative. The fact that it is so disposed as to make five partitions on each side of the so-called envelope instead of one does not deprive it of its character as a partition member. It is a five-in-one, or tenin-one, partition member.

It was, therefore, erroneous to speak of the so-called transverse dividers, defined as counsel for the plaintiff defined them, or the so-called lateral partitions, to use the description given by counsel for the defendant, as if such transverse dividers or lateral partitions were partition members. They are not and this fact cannot be too strongly stated. There are only two partition members in Exhibit 13. The handle member is one of them and the rest of the interior assembly, other than the handle member, is the

The second question, namely, whether this other partition member is transverse to the handle member partition member is not as difficult to answer as at first appears. Counsel for the defendant suggested that it was odd to think of this other partition member as being transverse to the handle member, since its two sides run in the same direction as the handle member for the length of the carton and the handle member is contained within them and since the upper portions of the sides of the so-called envelope and the lower portions that go almost to the bottom of the carton at their ends assist in separating the rows of bottles from

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each other and to that extent perform the function of longi-UNIPAK CAR- tudinal as opposed to lateral division. How then, under these circumstances, could it properly be said that the other member is transverse to the handle member? Indeed, I must confess that I was impressed with counsel's suggestion and expressed the opinion during the trial and the argument Thorson P. that counsel for the plaintiff had a difficult task to face. Since then I have read the transcript of the evidence and argument and examined the relevant exhibits and have come to the conclusion that the answer to the question, far from being difficult, is clear. In Exhibit 13 the other partition member is folded over the handle member at the central line of the sheet composing it so that its sides drop downward but the folds on the sides of the central slot are immediately over the shoulders of the handle member and across and athwart it. In this connection, I again find help in Exhibit 14. If the handle member were held vertically and the other partition member, that is to say, the rest of the interior assembly other than the handle member, spread out it would be plainly seen that the whole of the other member would lie across the handle member and be situated athwart it and extend across its length and thus be transverse to it. It does not cease to be so by reason of the fact that when it is folded at the central crease line over the handle member its two sides extend downward, one on each side of the handle member. It still lies across the handle member so that it is athwart it and extends across its whole length. Thus I answer the second question in the affirmative and find that this other partition member in Exhibit 13 is transverse to the handle member. And this finding is not affected by the fact that the so-called envelope lies the length of the carton and that portions of it assist in separating the rows of bottles from each other and to that extent perform the function of longitudinal division in addition to the function of lateral division performed in the manner already described.

The answers to the first and second questions make the answers to the third and fourth ones comparatively easy. As the other partition member is transverse to the handle member so the handle member is transverse to it. The relationship between the two partition members is a reciprocal one. Each crosses the other, which means of course that one is above and the other below. At its shoulders the handle

member is below the other member but extends across its length and is transverse to it. Thus the handle partition UNIPAK CARmember and the other partition member are mutually transverse partition members within the meaning of the claim. Crown Zellerbach And it is manifest that in their totality they define article receiving compartments in the carton.

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I now come to the requirements of the claim relating to Thorson P. the mutually transverse partition members. There is no dispute that the handle partition member meets all the requirements. It is the selected partition member within the meaning of the claim and has the specified characteristic and is capable of the specified function. It includes a handle portion, like the hand grip portion of the handle member in Exhibit 4, and is movable between the two positions referred to in the claim, namely, a first retracted or lower one, in which the handle portion lies beneath the top closure, and a second operative or upper one, in which the handle portion projects above the top closure.

The final specification of the claim is that in the enclosed carton defined by it at least "one other of such partition members" is fixed to the wall structure and co-operates with the selected partition member to limit its movement outward of the wall structure. The term "such partition members' must mean the mutually transverse partition members previously referred to in the claim and the term "one other of such partition members" must mean a partition member that is one of "such partition members" and is other than the selected partition member, that is to say, other than the handle member partition member. In my opinion, the partition member in Exhibit 13 other than the handle member partition member is clearly within the meaning of the term "one other of such partition members" and the enquiry now narrows down to two remaining questions, the first being whether it is fixed to the wall structure and the second whether it co-operates with the selected partition member, the handle member, to limit its movement outward of the wall structure. There cannot be any doubt that the first of these questions must be answered in the affirmative. The term "wall structure" has been defined earlier in the claim as comprising side and end walls and a bottom and it is not specified that the partition member referred to is to be fixed to any particular portion of the wall structure so that if it is fixed to the side or end walls or to the

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bottom this specification of the claim is met. In Exhibit 13 UNIPAK CAR- the partition member referred to is fixed to the wall structure of the carton at five areas of attachment on each side wall and at two on each end wall and, in addition, the strip below the wings and connecting the tabs at their ends is attached to its appropriate side wall. Thus, it is fixed to the Thorson P. wall structure at sixteen areas of attachment. It may, therefore, be appropriately called the fixed partition member as distinguished from the selected partition member, the handle member, which is movable.

> The remaining question, namely, whether the fixed partition member co-operates with the selected partition member, the handle member, to limit its movement outward of the wall structure is the one around which the main controversy in this case turned. The claim does not specify how this co-operation is to be effected. All that is specified is that it accomplishes the specified purpose. There is no doubt that in Exhibit 4 the lateral partitions, being the partition members that are fixed to the wall structure, do co-operate with the selected partition member, the handle member, to accomplish the required result. The co-operation occurs when the handle member has been moved from its retracted to its operative position, at which time the lower edges of the slots in the wall portion of the handle member engage the under edges of the lateral partition at their centres so that they, being fixed to the wall structure, prevent the handle member from moving up any further. It is in this manner that the fixed partition members co-operate with the selected partition member, the handle member, to limit its movement outward of the wall structure of the carton and it is clear that the specified result is accomplished wholly by this co-operation. Here I might add, although strictly speaking, it is not necessary, that it is at the points of co-operation mentioned that the load imposed by the bottles on the bottom of the carton is transferred, via the side walls and the lateral partition, to the handle member and by it to the arm of the carrier of the carton. Or, to put it otherwise, it is at these points that the lateral partitions co-operate with the handle member by resisting the force exerted on the load when the handle member is lifted to its operative position and the carton is carried and so preventing the handle member from coming out of the carton.

It was argued by counsel for the defendant that in Exhibit 13 the lateral partitions extending out from the sides of the UNIPAK CABso-called envelope do not co-operate with the handle member at all and that what co-operates with it is something Crown Zellerbach that is connected to the lateral partitions and to the ends of the cartons. This argument falls to the ground, as counsel concedes it must, if the whole of the interior assembly Thorson P. other than the handle member is a partition member transverse to the handle member as I have found it to be. Consequently, in Exhibit 13 the required co-operation of the fixed partition member, being the whole of the assembly other than the handle member, with the selected partition member, the handle member, does take place and it accomplishes the specified purpose. When the handle is lifted from its lower to its upper position, which is its operative one, its shoulders engage the under sides of the shoulders of the so-called envelope or, to put it more nearly precisely, the under sides of the portions of the fixed partition member that lie immediately above and across the shoulders of the handle member, and so prevent the handle member from moving up any further. It is in this manner that the fixed partition member in Exhibit 13 co-operates with the selected partition member, the handle member, to limit its movement outward of the wall structure of the carton and the specified limitation is accomplished wholly by this co-operation. And here too I may add, with the same qualifications as previously, that it is at the points of co-operation mentioned that the load imposed by the bottles on the bottom of the carton is transferred, via the side and end walls and the fixed partition member, to the handle member and by it to the arm of the carrier of the carton. And, it is at these points that the fixed partition member co-operates with the handle member by resisting the force exerted on the load when the handle member is lifted to its operative position and the carton is carried and so preventing the handle member from coming out of the carton. Thus the co-operation of the fixed partition member in Exhibit 13 with the selected partition member, the handle member, is of the same kind as the co-operation of the fixed lateral partition members in Exhibit 4 with its handle member and the specified limitation is effected in each case.

In view of my finding that there are only two partition members in Exhibit 13, namely, the fixed partition member

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and the selected partition member, the handle member, and UNIDAK CAB- there is no doubt that the specified limitation of the outward movement of the handle member is accomplished it is clear that the specified limitation is accomplished solely and exclusively by the co-operation of the fixed partition member with the selected partition member, the handle member. There is nothing else in the carton that can contribute to the specified limitation of movement.

> Consequently, I find that all the elements specified in Claim 1 are present in Exhibit 13 and function as specified to accomplish the unitary result contemplated by it. In my judgment. Exhibit 13 is within the terms of Claim 1. I, therefore, find that the defendant has infringed the plaintiff's rights under it.

> In view of this conclusion a good deal of the evidence adduced in this case turns out to be irrelevant and need not be considered. In this connection it would be fair to state that it is much easier to determine its irrelevancy after the case has been fully argued than it would have been during the course of the trial when its outcome had not become clear. Under the circumstances, no useful purpose would be served in dealing with such matters as the manner in which the weight of the bottles in Exhibit 13 is carried or transferred to the handle member when the carton is lifted or how much of the load imposed by the bottles on the bottom of the carton is carried by the so-called lateral partitions and the side walls to which they are attached as compared with that carried by the so-called envelope and the end walls to which it is attached, or the manner in which the force exerted on the load in order to lift the carton is distributed in it. And I need not consider Mr. Treloar's evidence that the so-called envelope acts as a beam or deal with the matter of where stress is created when force is exerted on the load to lift the carton or what the nature of such stress is. Nor need I be concerned with the evidence given by Mr. Treloar as to the tests made by Sommerville Limited or the two-day evidence given by Mr. Barber relating to the tests of Exhibit 13 made by him during the course of the trial.

> I must next consider whether Exhibit 13 infringes the other claims in suit in respect of it, namely, Claims 4, 5, 6 and 7. Here I should point out that each of them is two claims in the alternative, either as including Claim 1

or as including Claim 2. And since it is not alleged that Exhibit 13 infringes Claim 2 I need not consider it in this UNIPAK CARconnection and, for a similar reason, I shall not consider whether Exhibit 13 infringes any of the other claims in suit to the extent that it includes Claim 2.

In my opinion, Exhibit 13 infringes Claim 4 to the extent that it includes Claim 1. The limitation in it relates to the Thorson P. means for locating the selected partition member, the handle member, in relation to one other of the partition members. It is not specified what the means should be. In Exhibit 4 it is the V-shaped or Y-shaped notch in the centre of the lateral partitions. There is, of course, no such notch in Exhibit 13 but the so-called envelope serves the same purpose. It is the means whereby the selected partition member, the handle member, is located in its relation to the other partition member in the carton, namely, the rest of the interior assembly other than the handle member.

And there is no doubt that Exhibit 13 infringes Claim 5 to the extent that it includes Claim 1, for the selected partition member referred to in the claim, namely, the handle member, has a hand grip portion that extends to the height of the wall structure when the handle member is in its first retracted or lower position.

Likewise, Claim 6 to the extent that it includes Claim 1 is clearly infringed by Exhibit 13 for a glued tape is used in it to seal the top.

Claim 7 to the extent that it includes Claim 1 presents a slight difficulty. It really includes Claims 5 and 6 but there is a further limitation relating to the recess in the centre of each of the top side flaps, to which I referred in my description of Exhibit 4. In Exhibit 13 there is no such recess but the same purpose is served by cutting the top side flaps so that they will not quite meet. In my judgment, the difference is so slight that it ought not to free the defendant from the charge that Exhibit 13 infringes the claim.

Thus I find that Exhibit 13 infringes Claim 1 and also infringes Claims 4, 5, 6 and 7 to the extent that each includes Claim 1.

I now turn to the defendant's counterclaim for a declaration that the patent in suit is invalid. It was attacked on several grounds, namely, lack of invention over the prior art, lack of novelty in that there were prior uses of the invention, ambiguity and avoidable obscurity in the claims and lack of utility.

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In each case the onus of proof of invalidity lies on the UNIPAK CAR- defendant. This follows of necessity from section 48 of the Patent Act, R.S.C. 1952, Chapter 203, which provides as follows:

48. Every patent granted under this Act shall be issued under the signature of the Commissioner and the seal of the Patent Office; the patent shall bear on its face the date on which it is granted and issued and it Thorson P. shall thereafter be prima facie valid and avail the grantee and his legal representative for the term mentioned therein

> The effect of the section, formerly section 47 of The Patent Act. 1935, Statutes of Canada, 1935, Chapter 32, was first considered in The King v. Uhlemann Optical Company¹. There I said, at page 161:

> There is a presumption of validity in favor of the patent by reason of its issue and the onus of proving that it is invalid for lack of invention is on the person attacking it The onus is not an easy one to discharge.

> The matter has also been dealt with in O'Cedar of Canada Ltd. v. Mallory Hardware Products Ltd.², Riddell v. Patrick Harrison & Co. Ltd.3, and Reliable Plastics v. Louis Marx⁴ and I need not repeat the statements in these decisions. I add only the comment that the statutory presumption is not confined to the attribute of inventiveness but extends to the other attributes that an invention must have if it is to be patentable under the Act, such as novelty and utility. The three attributes of patentability, namely, novelty, utility and inventiveness are all presumed to be present in an invention for which a patent has been granted under the Act until the contrary is clearly shown.

> Thus the plaintiff starts with the statutory presumption of validity of its patent in its favor and the onus is on the defendant to rebut it. In my opinion, it has failed to do so.

> There is no support for the contention that the invention covered by the patent in suit lacks utility. Indeed, counsel for the defendant, although he mentioned this ground of attack in his opening, did not argue it. And properly so, for, as I have already found, there can be no doubt about its utility. Exhibit 4, which embodies the invention, had many advantages over the beer cartons previously in use and enjoyed a substantial market in the Vancouver area. Indeed, it had all the dozen bottle carton business in that area until

¹ [1950] Ex. C.R. 142.

² [1956] Ex. C.R. 299 at 316.

³ (1957-58) 17 Fox P.C. 83 at 99.

^{4 (1958) 29} C.P.R. 113 at 127.

the defendant entered the field first with Exhibit 12 and then with Exhibit 13.

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In the particulars of objection it was alleged that the plaintiff's alleged invention was not new but was described, Crown Zellerbach more than two years before the filing of the patent application, in the specifications of prior patents and four patents were filed as exhibits. But counsel for the defendant relied Thorson P. only on a United States Patent No. 2,652,968 issued on September 2, 1952, in respect of an invention of a carton by P. A. Toensmeier. It was designed for beer cans. Although it was pleaded as an anticipation of the plaintiff's invention the Toensmeier patent was not put forward as such. It was relied upon only in the event that it should be held that Claim 1 extends to Exhibit 13 and it was submitted that in such event Claim 1 extends to a carton that is only a workshop improvement on Toensmeier and thus includes something that does not involve invention and is, consequently, not patentable from which it follows that the claim is invalid as extending to a carton that does not involve invention. I should state that this argument is based on an assumption to which I shall refer later but I must say that even on that basis I do not agree with it. I am unable to understand how the fact that Exhibit 13 falls within Claim 1 can make it extend to a carton that is only a workshop improvement over the Toensmeier carton unless it is assumed that Exhibit 13 is only a workshop improvement over the Toensmeier carton. Such an assumption should be dismissed out of hand. The elements and characteristics that feature Exhibit 13 and bring it within Claim 1 are absent in the Toensmeier carton. It has no top closure, there are no mutually transverse partition members in it to define article receiving compartments, as in Exhibit 13, and, while it has a handle member, the limitation of its movement outward of the wall structure of the carton is not effected by co-operation such as that which is present in Exhibit 13. And I reject the submission that the Toensmeier carton is, in effect, Exhibit 13 without the transverse dividers. In my judgment, the Toensmeier carton has no bearing on the issues in this case.

The remaining attacks on the validity of the patent, namely, that there were prior uses of the invention covered by it and that the claims in suit were ambiguous and avoidably obscure, were based on a somewhat involved assump-

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tion. In his opening counsel for the defendant referred to UNIPAR CAR- two alleged prior uses of the invention, one by Mr. Sharpe in 1935 and the other by Mr. Vesak late in 1952 or before March of 1953. He admitted that these were not prior uses of the invention exactly as described and illustrated in the patent in suit and stated that the defendant took the posi-Thorson P. tion that if the claims were read as extending to Exhibit 13 so as to make it an infringement of them they must also cover the structures designed by Mr. Sharpe and Mr. Vesak and that, if they did so, a reader of the claims could not know whether a particular structure was within the claims or not in which case they are ambiguous and avoidably obscure. Thus, in a sense, counsel combined the two attacks referred to. Counsel explained that his submission was based on the assumption that the Court might construe Claim 1. for example, as extending to any carton in which there are mutually transverse partitions and in which the limitation of movement of the handle member outward of the wall structure is accomplished otherwise than solely by the co-operation of a fixed partition member with the handle member, that is to say, by some means other than the co-operation specified in Claim 1 or by the combined co-operation of the fixed partition member and something else with the handle member. It was only on that assumption that the attacks were made. Here I might add that there were no attacks on the validity of the limitations in Claims 4. 5. 6 and 7 to which I have referred.

> In view of my reasons for finding that Exhibit 13 is an infringement of Claim 1 there is no warrant for the assumption on which counsel for the defendant based this attack. I did not construe Claim 1 as counsel assumed that I might do. I have found that Exhibit 13 is within the express terms of the claim in that it contains all the elements specified in it and that they function in the manner specified therein. With reference to the matter on which the assumption was particularly based I have found that in Exhibit 13 the limitation of the movement of the handle member outward of the wall structure of the carton is accomplished solely by the co-operation of the partition member which is fixed to the wall structure, namely, the whole of the interior assembly other than the handle member, with the selected partition member, the handle member, and not by any other means or by such co-operation and anything else.

I agree that Claim 1 might extend to a carton other than Exhibit 13 but that does not make it ambiguous or UNIPAK CARavoidably obscure. Whether it would so extend would depend on whether the particular carton has the elements specified in the claim and whether they function in the specified manner. The fact that the ambit of the claim is broad does not invalidate it if its terms are clear.

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There being thus no warrant for the assumption on which the charge of ambiguity and avoidable obscurity was based this attack on the validity of the claims in suit fails.

In view of counsel's statement that the two prior uses of the invention referred to by him were not prior uses of exactly the invention described and illustrated in the patent in suit it follows of necessity that the attack based on lack of novelty by reason of prior use fails.

But because of the length of time taken at the trial in dealing with the alleged prior uses it will not be amiss if I refer to them. Only a brief reference is necessary.

It seems clear that if a patent is to be invalidated on the ground that the invention for which it was granted lacks novelty by reason of the fact that there has been a prior use of it the party attacking the patent on that ground must show that the alleged prior use was a use of the invention described and claimed in it. It is also clear that the principles stated in the cases determining the requirements that a prior patent or other publication must meet before it can be considered as anticipatory of an invention apply with equal force in the case of an alleged anticipation by prior use.

Moreover, the cases indicate that evidence purporting to show that the invention was anticipated by a prior use of it "should be subjected to the closest scrutiny": vide the statement of Rinfret J., as he then was, delivering the judgment of the Supreme Court of Canada in Christiani & Nielsen v. Rice¹, affirmed by the Judicial Committee of the Privy Council²: vide also Campbell Mfg. Co. v. Thornhill Ind. and Radio Corp. v. Raytheon Mfg. Co. In the last mentioned case I stated that the onus of proof of a prior invention is a very heavy one.

¹ [1930] S.C.R. 443 at 452. ² [1931] A.C. 770.

³ (1952-53) 13 Fox P.C. 198 at 207. 4 (1957) 27 C.P.R. 1 at 37.

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With these considerations in mind I refer to the evidence UNIPAK CAR-relating to the cartons devised by Mr. Sharpe and Mr. Vesak on which counsel for the defendant relied. Mr. Sharpe's evidence relating to the so-called prior use attributed to him may be summarized. He came up with a 2×6 upright carton prior to 1938. He thought that it was in 1933. It had five cross partitions of corrugated paper, the two end partitions being U-shaped. These were slotted in the centre from the bottom up to a point past the middle. Down the centre of the carton there was a partition which formed a handle section. It was slotted at its shoulders from the top down so that it could slide up in the slots of the two end partitions. The other three partitions crossed the central one through slots in it from the bottom up. The end partitions were the full height of the carton and so was the handle section. The other three cross partitions were about half that height. When Mr. Sharpe had made up the carton he took it in to the office of his superior, Mr. Walsh, to await his return from Seattle. Then he held a conference with Mr. Walsh and Mr. Forster, another associate, with a view to having the carton taken to one of the breweries for sale and it was agreed that Mr. Forster should show it to a Mr. Hobday, the purchasing agent of the Vancouver Brewery. When Mr. Sharpe took the carton to Mr. Walsh's office the partitions were loose and it was decided that it would be better to fasten the end ones. Mr. Sharpe used some brass desk pins for the purpose. This was done so that Mr. Forster could carry the carton by its handle and be able to remove the pins and show the partitions to the purchasing agent. He also thought that the partitions could have been secured by stitching. There were four pins on each side of the carton for securing the flanges of the end partitions, two for each flange. Mr. Forster took the carton to Mr. Hobday but nothing came of it. Mr. Sharpe drew a sketch of his carton, which was filed as Exhibit Z-2, and on his cross-examination a small model based on this sketch was filed as Exhibit 72. Mr. Sharpe also drew other sketches to portray his carton in one of which, filed as Exhibit Z-5. the shoulders of the handle section of his carton were different from those shown in Exhibit Z-2. When this difference was pointed out to him on his cross-examination he explained that it was due to inaccuracy of draughtsmanship, an explanation that I consider reasonable. But on his cross-

examination he admitted that he had made a sample carton for Mr. Gourlay when he was preparing for his examination UNIPAK CARfor discovery. This purported to portray what he had come up with. This was filed as Exhibit 71. The construction of this carton is different from that shown in the sketch. Exhibit Z-2, and the model, Exhibit 72. The U-shaped partitions do not extend up to the height of the carton as in Thorson P. the sketch, Exhibit Z-2, and the model, Exhibit 71, and the functioning of the two cartons is not the same. On his crossexamination, Mr. Sharpe also admitted that he had previously given 1935 as the date of his device. Thus it appears that he gave three different dates for his device, drew sketches showing differences in the shoulders of the handle section of the cartons and described different cartons. In addition, there were no samples of his device, no drawings of it and no records showing it. Thus, Mr. Sharpe's evidence is not of the kind that should be allowed to invalidate a patent that is presumed to be valid. When counsel for the defendant was pressed to state which carton he relied upon. whether the one described by Mr. Sharpe or the one prepared for Mr. Gourlay's cross-examination, he indicated the former and I accept it for what it is worth. A carton having the assembly depicted in the sketch, Exhibit Z-2, and illustrated in the model, Exhibit 72, could, according to Mr. Sharpe, be carried when it was closed by reason of the fact that the U-shaped partitions extended up to the full height of the carton with the result that they would be held in place by the top of the carton or, to put it otherwise, that when the handle section was raised its shoulders would bear on the under side of the top of the carton. It was this arrangement that enabled the load imposed by the bottles on the bottom of the carton to be carried and prevented the handle from coming out of the carton. It is clear that this method of limiting the movement of the handle outward of the wall structure of the carton is a very different one from that specified in Claim 1 of the patent in suit. Thus the carton devised by Mr. Sharpe, assuming it to be the one described by him, was not a prior use of the invention described and claimed in the patent in suit. That being so, I need not consider the evidence of Mr. Hobday, to whom Mr. Sharpe's carton was disclosed, beyond saving that he had no precise recollection of what he had seen when Mr. Forster showed the carton to him.

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The evidence relating to the prior use attributed to Mr. UNIPAK CAR- Vesak may be dealt with briefly although it took up several days. It was alleged that he devised the carton relied upon as a prior use of the plaintiff's invention late in 1952 or before March of 1953. There is conflicting evidence on the question of date but, for the present purposes, I accept Mr. Thorson P. Vesak's evidence on this point. It is also established that Mr. Vesak was working on beer carton designs and came up with several of them but was discouraged in his efforts by Mr. Sharpe who wished him to work on 3×4 cartons. Finally, however, Mr. Vesak came up with a carton that had glued-in lateral dividers and a movable handle. Mr. Sharpe considered that this involved a good idea but was not practical. There is conflicting evidence on the details of this carton but I am prepared to accept, for the present purposes, the fact that a sample carton, filed as Exhibit Z-34, exemplifies the carton that Mr. Vesak devised and on which counsel for the defendant relied. I need not describe in detail how its interior assembly was constructed. It is sufficient to say that it contains a central envelope extending the length of the carton but not attached to the end walls. On each side of this envelope there are five lateral partition strips with tabs glued to the side and to a sheet of liner paper. This liner paper in turn is glued to the side wall of the carton. The envelope extends to the bottom of the carton. The handle member is enclosed within the two sides of the envelope with its hand grip portion extending upward from the shoulders of the wall portion through a slot cut in the centre of the top of the envelope. When the handle member is pulled up to its operative position its shoulders engage the under sides of the shoulders of the envelope on each side of the centre slot and this engagement prevents the handle member from coming out of the carton. The evidence indicates that Mr. Vesak gave instructions for the preparation of a sample of his carton to be shown to the defendant's patent attorney and a sample of this was filed as Exhibit 87. There are differences between Exhibit Z-34 and Exhibit 87 but, for the present purposes, I deem them not material.

I have examined Exhibits Z-34 and 87 and considered the arguments of counsel concerning them and have no hesitation in finding that Mr. Vesak's carton, whether exemplified by Exhibit Z-34 or by Exhibit 87, cannot possibly be considered a prior use of the invention defined in Claim 1 of the patent in suit. In the first place, its handle member is com- UNIPAK CARpletely enclosed within the sides of the envelope and does not separate the rows of bottles from each other. It is not a partition member at all. The function of longitudinal division is performed by the envelope. Moreover, the lateral partitions on each side of the envelope are not transverse Thorson P. partition members, within the proper meaning of the term "transverse". They extend only from the side of the envelope to the liner paper which is in turn glued to the side wall. They do not cross anything. Thus the carton does not contain any mutually transverse partition members so that these essential elements of Claim 1 are not present in it. And it follows, as a matter of course, that the outward limitation of the handle member cannot be accomplished by co-operation of the kind specified in Claim 1. What does co-operate with the handle member to limit its outward movement is the envelope via the undersides of its shoulders and it is not, in any sense, transverse to the handle member, even if it were considered the selected partition member, within the meaning of Claim 1. Thus, Mr. Vesak's carton cannot possibly be considered a prior use of the invention defined in Claim 1. It is inconceivable that anyone looking at Mr. Vesak's carton and hoping to achieve the invention in suit would sav—this gives me what I want!

Under the circumstances. I need not refer to the evidence given by Mr. C. M. Devaney, Mr. Vesak's neighbor, or that of Mr. George Christison, his assistant.

Nor should I attempt in this case to determine what constitutes a disclosure of an invention "in such manner that it had become available to the public" within the requirements of section 63(1)(a) of the Act, notwithstanding the careful and able arguments of counsel. In view of my findings that the cartons devised by Mr. Sharpe and Mr. Vesak are not prior uses of the invention covered by the patent in suit any statement that I might make on the subject would be plainly obiter.

Consequently, I find that Claim 1 and Claims 4, 5, 6 and 7 to the extent that each includes Claim 1 are valid.

During the trial there was a good deal of argument about Claim 2. Counsel for the defendant contended that it was contrary to the disclosures of the patent specification. If the plaintiff had not introduced the issue of infringement of

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the plaintiff's patent by the production and sale of Exhibit UNIPAK CAR-12 type cartons Claim 2 would not have been in suit. Consequently, since I have found that this issue was unwarranted and unduly prolonged the trial I am of the view that I should not make any pronouncement regarding Claim 2 or with regard to Claims 4, 5, 6 and 7 to the extent Thorson P. that they include Claim 2. And I should point out that Claims 8 and 9 were not attacked. Since the statutory presumption of validity is in their favor I need not make any declaration with respect to them.

> It follows from what I have said that the defendant's counterclaim must be dismissed and the plaintiff's action allowed to the extent that it claims damages for infringement of the patent in suit by the production and sale of Exhibit 13 type cartons. It will be entitled to judgment for the relief claimed. If it elects damages rather than an account of profits and the parties cannot agree on the amount of the damages to which the plaintiff is entitled, there will be a reference to the Registrar or to a Deputy Registrar to ascertain such amount and judgment for the amount so found.

> There remains only the matter of costs. Earlier in these reasons for judgment, I found that the time of the trial was unduly extended by the introduction of the issue of infringement of the patent by the production and sale of Exhibit 12 type cartons and I held that the defendant will be entitled to the costs properly attributable to such undue extension of time. After perusal of the transcript, I now fix the extent of this undue extension at three full days, with the result that the defendant will be entitled to its costs of such three full days, to be determined by the taxpayer.

> It follows that the plaintiff's costs will be costs of the action and of the counterclaim except for the costs of the said three days allowed to the defendant as aforesaid. The said costs of the defendant will be offset against and deducted from the costs of the plaintiff, limited as aforesaid to its taxed costs, except for the costs of the three days allowed to the defendant.

> > Judgment accordingly.