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BETWEEN:  
 IRVING AIR CHUTE COMPANY, INC. . . . APPELLANT;  
 AND  
 HIS MAJESTY THE KING . . . . . RESPONDENT.

*Patents—Reasonable compensation for use of invention—The Patent Act, 1935, ss. 19, 33—Order in Council P.C. 6982, dated December 4, 1940—Reasonable compensation a question of fact—Usefulness of invention—Value of invention to owner—Established royalty rule—Reasonable royalty rule—Use of invention of combination.*

Respondent entered into contract with S. for purchase of parachutes, the production and sale of which involved use of inventions covered by five patents owned by appellant, and gave S. indemnity against infringement proceedings under Order in Council P.C. 6982 of December 4, 1940. Appellant brought proceedings before Commissioner of Patents for reasonable compensation for use of inventions and appealed from the Commissioner's decision.

*Held:* That what is reasonable compensation for the use of an invention is a question of fact depending upon all the surrounding circumstances and that the usefulness and success of the invention is an important factor.

2. That the principles for measuring damages laid down in the infringement cases, although not binding upon the Commissioner in determining what is reasonable compensation under the Order in Council, should not be disregarded as inapplicable. The Commissioner should take into account the damages to which the owner of the patents would have been entitled against the user of the inventions covered by them, if the Order in Council had not been passed, measured by the profits the user would have made or by the established royalty if there is one, or in its absence by an estimated reasonable royalty, since the amount of such damages represents the value to the owner of the patents of the right that has been taken from him, but the amount of such damages, although a useful guide to the Commissioner, is not binding upon him for he must also take into account another factor, namely, that if the compensation for the use of the invention by a contractor for the Crown is to be reasonable, it must be fair not only to the owner of the patents covering the inventions, but also to the Crown, having regard to all the circumstances of the case. *Meters Ltd. v. Metropolitan Gas Meters Ltd.* (1910) 27 R.P.C. 721; (1911) 28 R.P.C. 157, approved.
3. That where the invention is of a combination of elements the essence of the invention is the combination, not any element in it, and the owner is entitled to compensation for its use.
4. That in fixing a reasonable compensation for the use of an invention of a combination the selling price of the article in which such invention is inseparably embodied so that it cannot be used apart from the article is a reasonable base for the application of a reasonable rate of royalty.
5. That when the Commissioner excluded the value of the canopy and shroud lines from the base to which he applied the rate of royalty he considered reasonable he acted on a wrong principle.

Appeal from decision of Commissioner of Patents under Order in Council P.C. 6982, dated December 4, 1940.

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The appeal was heard before the Honourable Mr. Justice Thorson, President of the Court, at Ottawa.

*R. S. Smart, K.C.* for appellant.

*Gordon F. Henderson* for respondent.

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

The President now (March 21, 1947) delivered the following judgment:

THORSON, P.—This an an appeal from a decision of the Commissioner of Patents in proceedings taken by the appellant under Order in Council P.C. 6982, dated December 4, 1940, for reasonable compensation for the use of certain inventions. The Order in Council provides:

WHEREAS The Patent Act (1935), Section 19, provides that the Government of Canada may at any time use any patented invention, paying to the patentee such sum as the Commissioner of Patents reports to be a reasonable compensation for the use thereof, and further provides that any decision of the Commissioner of Patents under the said section shall be subject to appeal to the Exchequer Court of Canada;

AND WHEREAS the Minister of Munitions and Supply reports that in certain cases it is desirable and in the public interest to protect persons engaged in the production of munitions of war or supplies or in the carrying out of defence projects aganst claims for infringement of patents or registered industrial designs;

Now, THEREFORE, His Excellency the Governor General in Council, on the recommendation of the Minister of Munitions and Supply, with the concurrence of the Secretary of State of Canada, and under and by virtue of the powers conferred by *The War Measures Act* and all other enabling powers, is pleased to order and doth hereby order:

That if the Minister of Munitions and Supply, on behalf of His Majesty the King in right of Canada or on behalf of His Majesty's Government in the United Kingdom of Great Britain and Northern Ireland has agreed or hereafter agrees to indemnify or to protect any person, firm or corporation against any claims, actions or proceedings for the infringement of any patent or registered industrial design based upon the use of the invention or design covered thereby in the production or sale of munitions of war or supplies or in the carrying out of defence projects by such person, firm or corporation, then no claim, action or proceeding for the infringement of any such patent or registered industrial design based upon such use shall be made or instituted against such person, firm or corporation or his or its agents or subcontractors; but His Majesty shall pay to the owner of any such patent or registered

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industrial design which is valid such compensation as the Commissioner of Patents reports to be reasonable for the use aforesaid of the invention or design covered by such patent or registered industrial design, and any decision hereunder of the Commissioner of Patents shall be subject to appeal to the Exchequer Court.

And section 19 of The Patent Act, 1935, Statutes of Canada, 1935, chap. 32, provides:

19. The Government of Canada may, at any time, use any patented invention, paying to the patentee such sum as the Commissioner reports to be a reasonable compensation for the use thereof, and any decision of the Commissioner under this section shall be subject to appeal to the Exchequer Court.

On September 18, 1940, the respondent, through the Department of Munitions and Supply, entered into a contract with Switlik Canadian Parachute Limited (hereinafter called Switlik) for the purchase of parachutes, the production and sale of which involved the use of inventions covered by five patents owned by the appellant of which its Canadian subsidiary, Irvin Air Chute Limited, was the Canadian licensee. Proceedings for infringement of the patents were then brought against Switlik by the appellant and its Canadian licensee. Then the Order in Council was passed and the Minister of Munitions and Supply gave Switlik the necessary letter of indemnity, which not only freed it from infringement proceedings but also made the respondent liable for "such compensation as the Commissioner of Patents reports to be reasonable". On May 1, 1942, the appellant applied by petition to the Commissioner to fix the compensation. No further steps in the infringement proceedings were taken. At the time of the contract with Switlik the respondent also made a contract for the purchase of the same kind of parachutes with the appellant's Canadian licensee, Irvin Air Chute Limited. Subsequently, the terms of this contract as to the price of the parachutes were revised, but the amount to be paid by way of royalty was left undetermined, it being agreed by the respondent that in addition to the amount specified in the contract he would pay such amount by way of royalty in respect of each parachute as might be determined under the Order in Council to be payable in respect of each parachute manufactured and/or sold by Switlik for or to the respondent. While the jurisdiction under the Order in Council is confined to fixing the com-

pensation to the appellant for the use of its inventions by Switlik, the amount so fixed will also determine the amount of the respondent's liability by way of royalty under its contract with Irvin Air Chute Limited.

The appellant is the owner of the following five Canadian patents of invention, namely, (1) No. 255,164, dated November 3, 1925, for an invention of Guy M. Ball, relating to Body Harness for Aviators; (2) No. 273,872, dated September 13, 1927, for an invention of Leslie L. Irvin and Guy M. Ball, relating to Parachute Packs; (3) No. 304,455, dated September 30, 1930, for an invention of Hilbert Gustave Hamer, relating to Parachute Apparatus; (4) No. 355,200, dated January 7, 1936, for an invention of Leslie L. Irvin, relating to Parachute Apparatus; and (5) No. 355,647, dated January 28, 1936, for an invention of Leslie L. Irvin, relating to Parachute Apparatus. It is admitted for the purpose of these proceedings that all the patents are valid and that the inventions covered by them have been used by Switlik. And it seems to be agreed that the compensation should be found for the use of the inventions collectively rather than individually.

The parachute equipment in which the inventions covered by the patents were embodied consisted of a harness to be worn by the aviator to which there could be attached a container or pack having a canopy with shroud lines and a pilot chute packed therein.

Evidence relating to the patents was given by the appellant's president, George Waite, by way of affidavit submitted with the petition and made part of it. Paragraphs 6 and 7 of his affidavit set out the conditions that a free type parachute equipment must satisfy and the extent to which such conditions were satisfied. Then the almost universal extent to which parachute equipment embodying the inventions covered by the patents has been adopted appears from the following deposition in paragraph 9:

Free type parachutes and harness embodying the basic inventions covered by patents 255, 164 and 273, 872, are a standard equipment in the air forces and commercial air services in at least thirty-six countries, and for many years were the only free type parachutes used or issued therein. Moreover, in all the said countries except the United States the improvements covered by the subsequent patents are also embodied in the standard free type parachutes so used and issued.

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This does not mean that the success of these parachutes is due exclusively to the embodiment therein of the inventions covered by the five patents, but that they have contributed to such success is beyond dispute. In my opinion, the evidence that the inventions have been useful and successful is conclusive. The affidavit also sets out the appellant's royalty arrangements in various countries (Exhibits 2 to 7) and concludes with paragraph 21 as follows:

21. That from my experience in negotiating the above mentioned royalty contracts and other negotiations with manufacturers in the United States, I am able to say that in the industry of manufacturing parachutes a royalty of 10 per cent of the selling price is regarded as a reasonable royalty, subject to a reduction to 7½ per cent on any parachutes in excess of 10,000 per year.

No contradictory evidence was offered.

The Commissioner examined the inventions with reference to the prior art and expressed the opinion that they were not basic but merely inventions of improvements. He then dealt with the question of royalty and fixed a rate of 5 per cent for the first 5,000 parachutes produced and a rate of 3.75 per cent on those produced in excess of such number and applied such rate, not to the selling price of the whole parachute equipment, but only to the cost of manufacture of the harness and container or pack, leaving out all the rest of the equipment such as the canopy, shroud lines and pilot chute. Finally, he fixed a flat rate of \$2.00 per unit. He further named, although not asked to do so, a rate of 25 cents for container replacements and \$1.75 for harness replacements. From this award the appellant appeals and the respondent cross appeals.

This is the first case under the Order in Council and the only issue is whether the royalty of \$2.00 per unit is reasonable compensation for the use by Switlik of the appellant's inventions. On the basis of the selling price of approximately \$200 per unit, this works out at a rate of approximately 1 per cent. The appellant contends for a rate of 10 per cent with a reduction to 7½ per cent for each parachute in excess of 10,000. On the other hand, the respondent in its cross appeal contends that the amount reported by the Commissioner is extravagant, having

regard to the total result and ought to be cut in half. There is thus a wide difference between the parties.

Counsel for the appellant stated the respects in which he thought the Commissioner had erred as follows, namely, that there was error in his assumption that the amount of the compensation should be determined by relation to the breadth or narrowness of the claims in the patents; that he disregarded the principles of the *Meters* case (*infra*) in allowing a royalty on only part of the combination claimed; that he had misconceived section 33 of The Patent Act; that even on his own basis of calculation he had improperly reduced the number of parts on which he calculated the royalty; that he based the royalty on the cost of manufacture instead of the selling price; and that he failed to follow the reasonable royalty rule.

I may say at the outset that I am unable to see how the breadth or narrowness of the claims can be relevant. Counsel for the respondent took the position that the Court must look at the contribution made by the inventor to be able to determine what is reasonable compensation for the use of his invention and that the Court might look at the breadth or narrowness of the claims in the light of the prior art in order to ascertain the essence of the inventions and the advance in the art made by the inventor so that he may be compensated accordingly. This argument is open to several objections. It is not possible to depreciate the value of an invention by reference either to the prior art or the narrowness of the claim defining it, for only a slight change from the prior art may make all the difference between success and failure. Moreover, it is wrong to assume from the documents disclosing the state of the prior art that the structure of any particular patent shown therein solved the problem and that the invention under discussion is only a minor improvement, for that requires proof by appropriate evidence and there is no evidence that the prior art worked. Further, the essence of the inventions covered by the patents is to be determined by the language of the claims, and not apart therefrom. The issue is not whether the claims, all of which are admitted as valid, are broad or narrow, but what the inventions as defined by them are and what is

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reasonable compensation for their use by Switlik. What is reasonable is a question of fact, depending upon all the surrounding circumstances. A similar attitude was taken by Luxmore J. in *Applications by Brownie Wireless Co., Ltd.* (1), a case regarding the applications for the grant of compulsory licences on the ground that the patentees had refused to grant licences on reasonable grounds.

There he said:

The grant of the licence which is refused must be a grant "on reasonable terms", an elastic phrase which can only be construed with certainty with reference to the actual facts of each particular case. No one can hope to lay down any exhaustive rules to enable the question whether the terms of a proposed licence are reasonable or not to be answered with certainty in every case. The answer to the question must in each case depend on a careful consideration of all the surrounding circumstances. The nature of the invention covered by the patent, the terms of the licences (if any) already granted, the expenditure and liabilities of the patentee in respect of the patent, the requirements of the purchasing public, and so on.

This does not purport to be an exhaustive statement of all the factors to be considered. It seems clear, for instance, that regard should also be had to such factors as the usefulness and success of the invention. In the present case that is an important factor.

I am also of the opinion that section 33 of The Patent Act has no bearing on the issue before the Court.

The remaining criticisms of the Commissioner's decision are grouped under two main contentions. The first is that where there is an established royalty that is a useful key to the compensation to be paid; that there was an established royalty in the present case; and that the Commissioner failed to follow it. The second contention is that the royalty should be calculated on the selling price of the whole parachute equipment; and that the Commissioner erred in confining the rate fixed by him to the cost of manufacture of only the harness and the container or pack.

In support of both contentions counsel relied on *Meters Ltd. v. Metropolitan Gas Meters Ltd.* (2). This was an action for infringement of patents for improvements in prepayment gas meters. Two patents were involved, the subject matter of the earlier one being a combination with a long driving pinion and a readily changeable crown

(1) (1929) 46 R.P.C. 457 at 473.

(2) (1910) 27 R.P.C. 721; (1911) 28 R.P.C. 157.

wheel in such a manner as to regulate the exact amount of gas supplied for a certain payment in accordance with the fixed price of gas for the time being, and that of the later one being an arrangement for closing the gas supply valve in the meter by means of a cam or inclined face, or its equivalent, and opening the valve by means of a spring. The defendant had sold meters importing one or both of the inventions. By consent judgment was given restraining the defendants from infringing the plaintiffs' patents and an inquiry as to damages was ordered. In arriving at the amount of his certificate the Master, under one head of damages, estimated that but for the defendants' sale of infringing meters the plaintiffs would have sold 5,000 more meters and he assessed the damage under that head at 13s. 4d. per meter as the profit which would have been made on the sale of each of the 5,000 meters. On proceedings to vary the Master's certificate the defendants contended, *inter alia*, that the Master should not have assessed the profit on the whole meter but only such portion as was attributable to the two inventions. The parts involving the inventions were of small intrinsic value and the profit on them represented about 1/44th of the profit on the whole meter. The defendants urged that these parts were unimportant, that the functions which they performed could be performed by many other well-known devices not constituting infringements of the plaintiffs' patents, and that their incorporation in the meters could not possibly justify the damage to the plaintiffs being measured by the profit on the whole meter. In support of their contention they relied upon *Clement Talbot Ltd. v. Wilson* (1) to which I shall later refer. *Eve J.*, however, held that this case had no application to the facts before him. It was his opinion that the mechanism protected by the patents was of the very essence of the meter and he held that the inclusion in the defendants' meter of the infringements resulted in the meter itself being an infringement and that the Master had rightly held that the profit on the meters was a proper factor to be taken into the calculation and not the profit only on the parts of the inventions. On the appeal from

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(1) (1909) 26 R.P.C. 467.



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this judgment, upon which counsel for the appellant relies for his second main contention, the views thus expressed by Eve J. were not questioned. This will be further dealt with after the first contention has been disposed of.

In support of his first main contention, counsel relied upon certain statements by Fletcher Moulton L.J. in the Court of Appeal, at page 164:

There is one case in which I think the manner of assessing damages in the case of sales of infringing articles has almost become a rule of law, and that is where the patentee grants permission to make the infringing article at a fixed price—in other words, where he grants licences at a certain figure. Every one of the infringing articles might then have been rendered a non-infringing article by applying for and getting that permission. The Court then takes the number of infringing articles, and multiplies that by the sum that would have had to be paid in order to make the manufacture of that article lawful, and that is the measure of the damage that has been done by the infringement. The existence of such a rule shows that the Courts consider that every single one of the infringements was a wrong, and that it is fair—where the facts of the case allow the Court to get at the damages in that way—to allow pecuniary damages in respect of every one of them.

The rule referred to has been described as the established royalty rule. The statement clearly indicates one manner of assessing damages in the case of sales of infringing articles, namely, that where there is an established royalty for the use of an invention in an article, such royalty may be used as the measure of damages for the infringement of the patent covering such invention. But Fletcher Moulton L.J. went further and suggested that where there was no established royalty the Court might estimate what could reasonably have been charged and use such estimate as the measure of damages. He continued as follows:

I am inclined to think that the Court might in some cases, where there did not exist a quoted figure for a licence, estimate the damages in a way closely analogous to this. It is the duty of the defendant to respect the monopoly rights of the plaintiff. The reward to a patentee for his invention is that he shall have the exclusive right to use the invention, and if you want to use it your duty is to obtain his permission. I am inclined to think that it would be right for the Court to consider what would have been the price which—although no price was actually quoted—could have reasonably been charged for that permission, and estimate the damage in that way. Indeed, I think that in many cases that would be the safest and best way to arrive at a sound conclusion as to the proper figure.

The rule thus suggested may be referred to as the estimated reasonable royalty rule. The views expressed in this dictum, although *obiter*, were approved in *Watson, Laidlaw & Co.*

*Ltd. v. Pott, Cassels, and Williamson* (1) by Lord Salvesen in the Inner House of the Scottish Court of Session, and by Lord Shaw in the House of Lords who, in dealing with damages for the unauthorized sale or use of infringing machines in a market which the infringer, if left to himself, might not have reached, described a royalty as "an excellent key to unlock the difficulty" and stated that he was in entire accord with the principle laid down by Lord Moulton in the *Meters* case (*supra*). And Lord Shaw's statement was cited with approval by Kerwin J. in giving the judgment of the majority of the Supreme Court of Canada in *Colonial Fastener Co. Ltd. et al. v. Lightening Fastener Co. Ltd.* (2) And in *British Thomson-Houston Co., Ltd. v. Naamlooze Vennootschap Pope's Metaaldraadlampenfabriek* (3) Lord Clyde considered the dictum authoritative. It is clear that in many cases its application would be fair and reasonable.

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Counsel next referred to cases in which the Courts have been concerned with the question of reasonable royalty in compulsory licence cases. In the *Brownie Wireless Co. Ltd.* case (*supra*) Luxmore J., in dealing with whether a royalty of 12s. 6d. on a certain article was reasonable, expressed the following opinion, at page 475:

There is in fact no necessary relationship between cost price or selling price on the one hand, and the royalty which a patentee is fairly entitled to ask on the other. The best test of whether a royalty is reasonable in amount or the reverse is: How much are manufacturers who are anxious to make and deal with the patented article on commercial lines ready and willing to pay?

Counsel also referred to *Re Beltfasteners Limited et al.* (4); *Re Glaxo Laboratories Ltd.* (5); *International Cone Co. Ltd. v. Consolidated Wafer Co.* (6); and *Celotex Corporation et al. v. Donnacona Paper Co. Limited* (7).

The established royalty rule has been applied for a long time in the United States. In *Clark v. Wooster* (8), Mr. Justice Bradley, delivering the opinion of the Supreme Court of the United States, said:

It is a general rule in patent cases, that established licence fees are the best measure of damages that can be used. There may be

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| (1) (1913) 30 R.P.C. 285 at 293; | (5) (1941) 58 R.P.C. 12.                    |
| (1914) 31 R.P.C. 104 at 120.     | (6) (1926) Ex. C.R. 143; (1927) S.C.R. 300. |
| (2) (1937) S.C.R. 36 at 45.      | (7) (1939) Ex. C.R. 128.                    |
| (3) (1923) 40 R.P.C. 119 at 127. | (8) (1886) 119 U.S. 322 at 326.             |
| (4) (1940) 57 R.P.C. 104.        |   |

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damages beyond this, such as the expense and trouble the plaintiff has been put to by the defendant; and any special inconvenience he has suffered from the wrongful acts of the defendant; but these are more properly the subject of allowance by the court, under the authority given to it to increase the damages.

And *Vide* also *Tilghman v. Proctor* (1). The Courts in the United States have also adopted the theory of a reasonable royalty, similar to that suggested by *Fletcher Moulton L.J.* in the *Meters* case (*supra*), and counsel for the appellant cited a number of cases in which 10 per cent of the selling price of the infringing article was held to be a reasonable royalty: *Dunkley Co. v. Vrooman et al* (2); *A. Mecky Co. v. Garton Toy Co.* (3); *W. S. Godwin Co. v. International Steel Tie Co.* (4); *International Vitamin Corporation v. E. R. Squibb & Sons* (5).

Counsel for the appellant then referred to a number of cases in the United States Court of Claims, where it was required to fix a just and reasonable compensation for the use by the United States of inventions covered by patents. The problem was very similar to the one now before this Court. In *Carley Life Float Company v. United States* (6) the plaintiff was the owner of a patent covering life floats and had granted an exclusive licence to a certain company to manufacture and sell under the patent subject to royalties which varied from 20 per cent to 13·75 per cent of the actual selling price. The United States purchased from an unlicensed manufacturer a certain number of floats which infringed the patent. The Court of Claims applied the principles laid down by the Supreme Court of the United States in *Clark v. Wooster* (*supra*) and *Tilghman v. Proctor* (*supra*) and held that "just and reasonable compensation" to the plaintiff was 10·86 per cent of the total of the infringing sales, together with interest at 6 per cent from the last date of delivery to the date of judgment. The Court fixed the established royalty as just and reasonable compensation. And similarly in *Barlow v. United States* (7) the Court held that a royalty of 10 per cent established by a licence contract was a reasonable one. In *Olsson v. United States* (8) the plaintiff's claim

(1) (1887) 125 U.S. 136.

(2) (1921) 272 Fed. 468.

(3) (1921) 277 Fed. 507.

(4) (1928) 29 Fed. (2nd) 476.

(5) (1935) 27 U.S.P.Q. 440.

(6) (1932) 13 U.S.P.Q. 112.

(7) (1937) 34 U.S.P.Q. 127.

(8) (1938) 37 U.S.P.Q. 767.

was for compensation for the manufacture and use by the United States of howitzers embodying his invention resulting in savings to the United States in weight and manufacturing costs and other advantages of value in use. The Act of June 25, 1910, as amended by the Act of July 1, 1918, provided that whenever an invention described in and covered by a patent of the United States "shall hereafter be used by the United States without licence of the owner thereof or lawful right to use the same, such owner may recover reasonable compensation for such use by suit in the Court of Claims". The Court held that the compensation to which the plaintiff was entitled was the fair and reasonable value to him of the property right or licence appropriated by the Government, based upon an implied agreement by the United States to pay reasonable and entire or just compensation for such value. It followed *Mamie C. Wood et al v. United States* (1) where the Court said:

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But this court, in the leading case of *McKeever* (14 C. Cls. R. 396; affirmed by the Supreme Court, see 18 id. 757), laid down a sufficient rule for such cases. The question to be determined is. What was the invention worth in the market? What would the parties have taken and paid if the matter had come to an express agreement? What would any person needing the invention have been willing to pay for it?

The Court then concluded that the reasonable and entire compensation to which the plaintiff was entitled must be an amount which the United States ought to have paid him, or would probably have been willing to pay, for a licence to use his invention by reason of its utility and the several advantages accruing to the United States by reason of its embodiment in the guns in question. The Court considered that this was less than the total monetary value of the savings and advantages to the United States by reason of such use and held that 25 per cent thereof, together with interest from the date of use, was a reasonable and entire compensation to the plaintiff. There is a striking resemblance between the rule in the *McKeever* case, adopted by the Court, and the test suggested by Luxmore J. in the *Brownie Wireless Co. Ltd.* case (*supra*) and it is interesting to note the manner in which the Court assimilates the rule to that of an estimated reasonable

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royalty and illustrates the way in which the value of the invention to the owner may not be the same as its value to the user of it. The most recent Court of Claims case cited was *Marconi Wireless Telegraph Company of America v. United States* (1). There Whaley, Chief Justice, said, at page 250:

The Courts look with favour toward the establishment of a reasonable royalty as a measure of compensation in a patent accounting. This method usually obviates many difficulties connected with the establishing of such items as costs, profits, apportionments, expense of doing business, etc., all of which are matters frequently difficult to ascertain in a legal procedure.

If the plaintiff has already established a royalty by a licence or licences, he has himself fixed the average of his compensation and if this has been established prior to the infringement the task of the Court then becomes easy.

The Court found that 10 per cent was a reasonable royalty since the patent in suit and another patent were licensed at a minimum royalty of 20 per cent and subsequently, after the patent in suit expired, licenses for the other patent alone were reduced to 10 per cent. It is to be noted that the legislation under which the Court of Claims cases were decided is similar in principle to the Order in Council under which the appellant's claim for compensation is made.

Counsel for the respondent took the position that the issue was not one of awarding damages but of fixing a reasonable compensation for use of the inventions pursuant to a statutory right; that no infringement of the patent or any tortious act by the Crown was involved and that cases dealing with the measure of damages for infringement of patent rights were not applicable. Indeed, so it was urged, there were no cases binding on the Commissioner and no guiding principles with respect to which he could have erred; all the Commissioner was required to do was to look at the inventions broadly, ask himself what they were worth, and make a jury award accordingly; and that an award so made ought not to be disturbed.

When the Crown makes use of an invention under section 19 of The Patent Act, 1935, it, in a sense, exercises a right reserved out of the patent granted by it and the statutory right to be paid reasonable compensation for the

use of the invention is not related to any infringement. Nevertheless, the very use of the word compensation connotes some loss to the owner of the patent from the use of the invention by the Crown. But the situation under the Order in Council, although similar, is not precisely the same, for it is clear that, but for the Order in Council and assuming the patents to have been valid and used by Switlik, the appellant would have had a good cause of action against Switlik for infringement of its patents and would have been entitled to damages, measured by the profit on the sale of the infringing parachutes as in the *Meters* case (*supra*) or according to the established royalty if there was one or an estimated reasonable royalty if there was not. This right would represent the value of the patent to the appellant so far as Switlik would be concerned. But the Order in Council has taken such right of action away from the appellant and substituted a statutory right of action against the Crown for reasonable compensation. It may, I think, be assumed that if it had been intended that the right of the appellant against the Crown should be identical with the right to damages, it would have had against Switlik the Order in Council would have so provided. But it has not done so. On the other hand, and to the extent that the damages would be in the nature of compensation, there could not be any great difference between the two rights, and a compensation fixed without regard to the right to damages could not be said to be a reasonable one. Under the circumstances, the principles for measuring damages laid down in the infringement cases, although not binding upon the Commissioner in determining what is reasonable compensation under the Order in Council, should not be disregarded as inapplicable. The Commissioner should take into account the damages to which the owner of the patents would have been entitled against the user of the inventions covered by them, if the Order in Council had not been passed, measured by the profits the user would have made as in the *Meters* case (*supra*) or by the established royalty if there is one, or in its absence by an estimated reasonable royalty, since the amount of such damages represents the value to the owner of the patents of the right that has been taken

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from him, but the amount of such damages, although a useful guide to the Commissioner, is not binding upon him for he must also take into account another factor, namely, that if the compensation for the use of the invention by a contractor for the Crown, as Switlik was, is to be reasonable it must be fair not only to the owner of the patents covering the inventions but also to the Crown, having regard to all the circumstances of the case.

Counsel for the appellant contended that an established royalty had been proved. He relied upon the appellant's licence agreements referred to in paragraph 15 of Mr. Waite's affidavit (Exhibits 2 to 7) in Austria, Canada, Sweden and Finland, Spain, Yugoslavia and Great Britain, together with Mr. Waite's deposition in paragraph 21 that in the industry of manufacturing parachutes a royalty of 10 per cent of the selling price is regarded as a reasonable royalty, subject to a reduction to 7½ per cent on any parachutes in excess of 10,000 per year, and urged that this statement was unchallenged. Counsel for the respondent contended that the royalties referred to did not establish a royalty applicable to the facts before the Commissioner. He pointed out that the licence agreements were not between parties dealing with one another freely and at arms' length but between the appellant and its subsidiaries; that there was no identity of subject matter in that the patents covered by them were not the same as those here in question; that the agreements gave exclusive rights of user and rights to use not only present but also future inventions; and that generally the considerations and circumstances surrounding the agreements were different from those that the Commissioner had to consider. In addition the agreements were all made prior to the war and there was nothing to indicate what would be a reasonable royalty under wartime conditions. The evidence showed an enormous increase in the number of parachutes required and such increase must be taken into account. The number which the Government had on hand in 1935 was only 301; and between 1935 and 1939 it ordered only 1,138, or an average of 285 per year. But between October 1939, and September 10, 1943, it placed orders for 44,682 parachutes made up as follows: 24,940 man-carrying chutes; 22,780

man-carrying chutes; 7,962 war supply order. The last-mentioned number was supplied by the appellant's Canadian subsidiary operating under a 10 per cent royalty arrangement with the appellant, but the first two numbers represent the orders placed with Switlik and the appellant's subsidiary. While the Commissioner's jurisdiction extends only to the fixing of compensation for the use of the inventions by Switlik, it was agreed that the total number ordered might be taken into account as indicative of the volume of the wartime requirements.

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Under all the circumstances the Commissioner declined to accept the rate of royalty suggested by counsel for the appellant and adopted as reasonable a rate of 5 per cent on the first 5,000 parachutes produced and 3.75 per cent on those in excess of 5,000.

While there was no evidence of any royalties other than those fixed in the licence agreements, it should be noted that even if a royalty had been established it would not have been more than a guide to the Commissioner. He took the view that it had not been established that the patented inventions before him formed the complete subject matter on which the royalties were set in the licence contracts and he also took into account the greatly enlarged wartime demand for parachutes and the fact that one of the patents was due to expire on November 3, 1943. I think he was justified in considering such factors and I can find no error in his rejection of the rate of royalty suggested on the appellant's behalf. Whether he should have gone so far as to cut it in half is another matter, on which there may be a difference of opinion, but while that is so, I am unable to say that the rate adopted is unreasonable under wartime conditions. Moreover, the principle of a rate on a sliding scale according to volume of production has been recognized by the appellant itself and has much to commend it. Under the circumstances I see no reason in law for disturbing the rate found by the Commissioner.

This brings me to the appellant's second main contention that the Commissioner ought to have applied the rate of royalty fixed by him to the selling price of the whole parachute equipment and that when he applied it only



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to the cost of manufacture of the harness and the pack, leaving out such other elements as the canopy and shroud lines, there was error on his part.

Counsel for the respondent relied upon *Clement Talbot Ltd. v. Wilson et al* (1), to which I have already referred. There the defendants had imported a car containing certain patented parts under circumstances constituting infringement of the plaintiff's patents. The patents related to a carburettor and a control mechanism, both car accessories. In an infringement action judgment was given for the plaintiffs, including an inquiry as to damages. The plaintiffs claimed the amount of the profit on the sale by them of a car with the patented accessories, but the Court of Appeal denied such claim and held the amount of the damages was the loss of profit by not selling the accessories. This case was relied upon by the defendants in the *Meters* case (*supra*), as already indicated, who contended that the patented parts in the meters were analogous to the car accessories in that case. But Eve J. disagreed. At page 730 he said:

I do not think there is anything in common between the accessories in that case and the parts embodying the inventions in this case. There the accessories were of a nature capable of being applied to any car, and were certainly capable of being and were in fact dealt with as separate. Here nothing of that sort takes place and the parts incorporating the invention are, in my opinion, component and essential parts of the meter regulating and controlling—from the Gas Company's point of view—the most important functions of the meter, that is to say, the supply of the exact amount of gas to which the consumer is entitled, having regard to the amount that he has paid and the current price of gas. In my opinion, the mechanism protected by these patents is of the very essence of the meter;

Counsel contended that the inventions covered by the patents were only for minor improvements in the pack and harness and were in the same class as the accessories in the *Clement Talbot Ltd.* case (*supra*); and that it rather than the *Meters* case (*supra*) should govern. To determine whether there is any foundation for such contention it is necessary to examine the patents and ascertain what the inventions covered by them are.

Patent No. 255,164 relates to a parachute harness. The Commissioner found that it was for an improvement over

the inventions covered by six prior patents; that the difference was one of construction that did not constitute a new principle; and that it was an improvement rather than a basic patent. He also noted that it would expire on November 3, 1943. Counsel for the respondent sought to extract the essence of the invention in order to determine the contribution to the art made by the inventor. His analysis was that the patent was for an improvement in a parachute harness whereby the waistband was made extensible through the side portions so that it was adjustable by means of buckles and that the essence of the advance over the prior art was the use of the side portions to permit the adjustment of the waistband. But, as counsel for the appellant pointed out, the nature of the invention cannot be disposed of so simply. It must be found in the claims as stated in the patent; they define the inventions and there is no need to go further. There are 28 claims in the patent, of which claims 1 to 6, 9, 10 and 25 are relied upon. Claim 1 reads as follows:

1. In a harness adapted for attachment to the body of an aviator the combination of a U-shaped main supporting strap, a waistband connected with the U-shaped main supporting strap, shoulder straps connected at similar ends in fixed relation to the U-shaped strap and extending upwardly in crossed relation and thence downwardly for positioning at the front of the aviator, and means adjustably connecting the opposite ends for movement along said sides of the U-shaped strap.

Here the invention claimed is a combination of four elements, namely, a U-shaped main supporting strap, a waistband, shoulder straps and adjustable means. It is not proper to say that the essence of the invention is the last element merely because it is the new one and the others are old. The essence of the invention of a combination is the combination itself. The remaining claims 2-6 and 9-10 are also claims to combinations with variations in respect of the elements. Claim 25 is of a different nature, claiming a U-shaped main supporting strap as a subordinate integer. The patent covered more, therefore, than the invention of an improvement in the adjustability of the waistband through the use of the side portions of the U-shaped strap; it covered the new combinations of elements of the harness, including the improved means for adjusting the waistband, resulting in an improved harness.

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Patent No. 273,872 which is the most important of the five patents, relates to parachute packs. The Commissioner noted that the inventors claimed a parachute pack which includes a harness, a container and a parachute folded therein. He referred to prior patents as disclosing that the combination of a parachute, a container and a harness was known as early as 1919 and 1920 and agreed with counsel for the respondent that the patent should be regarded as one for an improved container adapted to house a parachute and to be used with a parachute harness and not for a combination of a harness, a container and a parachute. Counsel for the respondent took the view that the essence of the invention consisted of four novel features, namely, the use of pockets in the pack in which to tuck the shroud lines folded back and forth in a zigzag manner, cutting the material on the bias so that the strain can be transmitted transversely across the fabric, the use of tongues or flaps to seal the pack and the use of two tongues instead of one to keep the pilot chute separate from the main parachute. He argued that there was neither a new parachute assembly nor a new pack and that the patent covered only inventions of minor improvements in the pack. This, in my opinion, is an incorrect analysis of the inventions covered by this patent. The contention that it covers only inventions of minor improvements in a parachute pack is quite unwarranted. It does far more than that as the language of the claims clearly indicates. The validity of the patent is admitted and that extends to the claims and each claim must be regarded as if there were a patent for it by itself. It was, therefore, not open to the Commissioner or to counsel for the respondent to determine what the inventions covered by the patent were by reference to the prior art or any source apart from the language of the claims for they define the inventions, and the definitions therein are conclusive. There are 28 claims in the patent of which claim 1 reads as follows:

1. In a parachute pack, a parachute including shroud lines, a container therefor comprising a back having flaps for releasable connection, means providing a series of pockets in said back for the orderly reception of loops of said shroud lines, and tongues extending from the edges of some of said flaps adjacent to the corners of the back to be set up

freely to provide corners of the container to approximate a box-like structure when the pack is closed, the said tongues opening outwardly in release of said flaps.

This is plainly a claim for the combination of a number of elements in a parachute pack, namely, a parachute including shroud lines, a container comprising a back and having flaps, pockets in the back for the shroud lines, and tongues from the edges of flaps. It is not necessary to a claim for a combination that the word "combination" should be used in it, if in fact a combination of elements is claimed as the invention: *Baldwin International Radio Co. of Canada Ltd. v. Western Electric Co. Inc. et al* (1). What is claimed as an invention is the combination in a parachute pack of the elements named with their specified limitations. No claim is made for any one of the elements by itself, such as the pockets in the back, but only for all of them combined together in it. Then some of the elements are in themselves subcombinations, as exemplified in claim 2, which reads:

2. In a parachute pack a container, a parachute packed therein having shroud lines, and pockets in said container for tucking said shroud lines when packing said parachute.

Here the claim is directed only to three elements in a parachute pack, namely, the container, the parachutes and the pockets. This is the broadest claim in the patent. Claim 3 is more limited. It reads:

3. In a parachute pack a container, a parachute packed therein having shrouds, and spaced pockets in said container having the bundle of shrouds laid back and forth zig-zag between the same and packed therein.

Claims 2 and 5 cover the combination of claim 3 with greater definition of the elements. Then claim 7 introduces a new element. It reads:

7. In a parachute pack, a main parachute, a container including a back and flaps to fold over the same and retain the parachute between them and the back of the container, pockets in said back permitting an orderly non-tangling arrangement and packing of looped ends of the shrouds of said parachute, the canopy of said parachute being folded and packed over the pockets containing said shrouds and out of danger of entanglement therewith, a pilot parachute to overlie said main parachute, and a loose tongue attached inwardly to one of said flaps to be interposed between said parachute so that the pilot parachute is contained between said tongue and the overlying flaps.

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Here there is a combination of five elements with their respective definitions and limitations, a container having a back and flaps, pockets in the back for the shroud lines, a main parachute, a pilot parachute and a loose tongue between the main parachute and the pilot parachute. Then claim 9 brings in yet another element, namely, the harness. It reads:

9. In a parachute pack the combination with an aviator's harness including suspension straps, a container adapted to receive the ends of the suspension straps therein, a parachute, shroud lines connecting the parachute with the ends of the suspension straps, means for separably placing the shroud lines in parallel lengths in substantially the same plane within the container, and means for releasably closing the container.

This combination includes the elements in claim 2 and also the harness with suspension lines and the suspension lines are required to extend into the container so that they may be connected with the shroud lines. Then claims 10 to 13 resemble claim 7 and claims 14 to 17 are like claim 1. Claim 18 is a claim to the material of the container cut on a bias as a subordinate integer. Then claim 25 relates to releasably connected flaps and a pad on the back, and claims 27 and 28 are for the corner flaps that seal in the pack. It is plain from what has been said that the patent includes a succession of combination claims. The minimum combination has only three elements, the container, the pockets, and the canopy with the shroud lines tucked into the pockets. Then a fourth element is added in another combination, namely, the loose tongue or flap between the main parachute and the pilot parachute. Then in another combination there are corner flaps or aprons, and finally, there is a combination including the harness. Practically every element in the whole parachute equipment is included in one or other of the combinations.

In all the combination claims the combination claimed includes the canopy and shroud lines. It is the combination that is claimed and it must be taken as the invention covered by the patent. The invention is in the assembly of the elements and not in any individual element. That being so, it does not matter that some of the elements are old and not the subject of separate inventions. From this it is obvious that it is entirely erroneous to speak

of the inventions covered by this patent as inventions of minor improvements in a pack. What is covered is a series of combinations of elements in a pack. There is, therefore, no justification in seeking the essence of the inventions in the pockets for receiving the shroud lines or in any other novel feature, as counsel for the respondent attempted to do, for these are not the inventions claimed. If the combination is the invention, then the essence of it is the combination, not any element in it, and it is wrong to speak of anything except the combination as its essence. It is the combination itself that is the novelty. This is established beyond dispute in *British United Shoe Machinery Company Ltd. v. A. Fussell & Sons Ltd.* (1), where Fletcher Moulton L.J. said:

If what you have claimed, and the monopoly which you have obtained, is for a combination, that combination is the novelty, and you have no obligation beyond accurately defining it.

And in the same case, Buckley L.J., at page 657, said:

The combination is the novelty and to sufficiently describe the combination is sufficient to describe the novelty;

These statements were approved by Rinfret J., as he then was, speaking for the Supreme Court of Canada in the *Baldwin v. Western Electric* case (*supra*), at page 104. *Vide* also Terrell on Patents, 8th Ed., pp. 78-81. The pockets in the back of the container to receive the shroud lines attached to the canopy are not the essence of the invention nor are they claimed as such. By themselves they are worth nothing; they become important only when used in connection with a flap that will open and a pilot chute and a main parachute with shroud lines tucked into them. It is only as part of a combination that the pockets function. The idea of having pockets for the shroud lines was itself not new, for that was referred to in one of the patents filed on behalf of the respondent, where the pocket was in the canopy, but the idea of the place where the pockets were put, namely, in the back of the container together with what was combined with them was new. In this case the Court is not really concerned with ascertaining whether the combination was novel or not. The claim for it is admitted as valid, so that its novelty cannot be denied. But even apart from the admission I think it is

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clear that there was the invention of a new combination. It is quite true that the idea of a combination of a harness, a pack and a container was known as early as 1919 or 1920, as the Commissioner says. But the invention of a combination in general terms is not claimed. It is only a particular combination that is claimed as a novel one, namely, the combination of a container, pockets in the container and a parachute with shroud lines where the pockets are in the back of the container and the shroud lines are laid back and forth in a zigzag manner all in one plane and tucked into the pockets; this combination was never claimed before. This was a substantial and important invention.

The test of a combination is that it should lead to a unitary result rather than a succession of results; that the result should be different from the sum of the results of the elements composing it; and that it should be a simple and not a complex result. In *British United Shoe Machinery Co. v. A. Fussell & Sons Ltd.* (1), Buckley L.J. said:

For this purpose a combination, I think, means not every collocation of parts, but a collocation of inter-communicating parts so as to arrive at a desired result, and to this, I think, must be added that the result must be what, for the moment, I will call a simple and not a complex result.

There may be an interaction between the elements so long as they combine for a common and simple result flowing from the combination and not attributable to any of the elements. The inventions covered by the patent completely answer these tests of a combination. The whole pack with the container, the pockets in the back, the canopy and the shroud lines, the pilot chute, the loose tongue and the flaps constitute one safety device, operating in such a manner that the elements interact upon one another so that when the aviator jumps and pulls the rip cord, the flaps open, letting the pilot chute out first, then the loose tongue lets out the main parachute and the shroud lines are released in an orderly manner from the pockets without any danger of entanglement, and since the shroud lines are attached through the pack to the harness the common and simple result is that the aviator is safely airborne. All the elements are necessary to this one result.

(1) (1908) 25 R.P.C. 631 at 657.

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Patent No. 304,455 relates to a parachute apparatus. The Commissioner described it as an invention of a quick release of the harness from the pack and regarded it as an improvement and not a basic patent. Counsel for the respondent pointed out that the invention was an improved coupling means for attaching a detachable pack to a harness enabling the aviator to put it on in front instead of at the back. Counsel for the appellant agreed that the invention was an improvement in the connections between the shroud lines in the pack and the suspension lines of the harness, but also pointed out that several of the claims, of which there are 45, were for combinations of various elements. For example, claim 1 reads:

1. In parachute apparatus the combination of harness for attachment to the body of an individual, a unitary pack comprising a container having a parachute releasably packed therein, means to open the container and means to detachably connect the unitary pack to the harness with the pack disposed at the front of the bearer.

This is the broadest claim directed to a combination which enables the pack to be held at the front. Then a particular and novel combination is claimed in claim 6 which reads:

6. In parachute apparatus a harness attachable to the body of an individual including suspension lines extensible when in operation upwards above the individual, a releasable parachute pack, and complementary fastening devices on the pack and ends of the suspension lines constituting the sole connection of the parachute pack with the harness.

Here there is a combination of three elements, namely, a harness including suspension lines, a releasable parachute pack and complementary fastening devices all cooperating with one another towards a common and simple result. Then claim 11 is for a combination including a rip cord for the container at a side of the pack and claim 17 defines a sub-combination of shroud lines and fasteners. It may, I think, be said of this patent that almost every strap and fastener in the harness enters as an element into some one of the combinations claimed.

There is no controversy about Patent No. 355,200 which relates to a parachute apparatus. The inventions covered by it are of improvements in the adjusting means and quick release means in the harness by the use of a strap on which the quick release means moves and means whereby it is prevented from moving too far. The invention relates exclusively to the harness.



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And there is no real controversy with regard to Patent No. 355,647. The Commissioner said that the improvement covered by it was the use of a socketing device to hold the coupling means for attaching the harness to the pack. Counsel for the respondent described it as the keeper means adapted to hold the snap fasteners of the harness in a fixed position. But counsel for the appellant considered the invention a broader one as a combination of a single point release and a detachable pack.

In view of this analysis of the patents I am unable to see how the *Clement Talbot Ltd.* case (*supra*) can have any application to the facts of this case. There is no resemblance between the car accessories in that case and the parts embodying the inventions in this one. There the accessories were capable of being and were in fact dealt with separately. That could not be done in the case of the inventions embodied either in the harness or in the pack or in the parachute equipment as a whole.

The Commissioner took the view that "the patented inventions reside in the body harness, accessories and container only and do not extend to the main parachute, pilot parachute and kit bag". It was also his opinion that the inventor was entitled to royalties only on what he had invented, and that no royalties should be paid on what was in the public domain. This meant that in the case of inventions for improvements the royalties should be confined to the cost of the parts embodying such improvements. This was the same kind of argument as that which was rejected in the *Meters* case (*supra*). And it ought to be rejected here. The Courts have not adopted such arguments where they were assessing damages according to either an established royalty or an estimated reasonable royalty in cases where the parts of an article embodying the invention were not separable from it. In such cases the rate of royalty has been applied not to the cost of the parts embodying the invention but to the selling price of the whole article. And, in so far as the royalty cases are a useful guide to the Commissioner in determining what is reasonable compensation for the use of an invention, similar principles are properly applicable in cases where the only use that can be made of the invention

is through an article in which the invention is inseparably embodied and where there cannot be any use of it apart from such articles. In such case the selling price of the article, as in the case of the royalty cases, affords a reasonable base for the application of a reasonable rate leading to a reasonable result. The Commissioner did not hesitate to extend his royalty rate to the cost of the whole harness and the whole pack, notwithstanding the fact that there were old elements in each that were not claimed as inventions and were in the public domain. That he was right in doing so is, in my opinion, beyond dispute. I think he would have been right even if the only inventions had been those other than the combinations, but when the inventions of the combinations are taken into account there is no room for doubt. In such combinations as those defined in claim 1 in Patent No. 255,164 and claims 1 and 6 of Patent No. 304,455 there is hardly any part, either of the harness or of the pack, that is not included as an element of the combination and certainly all of them are essential and component parts thereof. There could, therefore, be no use of the inventions apart from the article in which they were embodied. And if the compensation is only for the use of the inventions, the value of the article in which the parts embodying them are inseparably included is a reasonable base for the application of a reasonable rate of royalty. The rate was properly applicable to the value of the harness and pack and there can, therefore, be no grounds for the respondent's cross appeal. Similarly, the Commissioner ought to have included in the base to which he applied his rate of royalty the value of such elements as the canopy and shroud lines. His failure to do so arises, I think, from a misconception of the nature of the invention. It is not correct to say that the inventions resided only in the body harness, accessories and container, for this leaves out all the combinations claimed in Patent No. 273,872, all of which include the canopy and shroud lines. It is not proper to omit these combinations from the computation and they must be taken into account. It is no answer to say that there was no separate invention covering the canopy and shroud lines and that they are, therefore, in the public domain and

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not subject to royalty, for there were inventions of combinations in which such elements were included with other elements. Indeed, there is hardly any element that was not so included in some one of the combinations. Even if royalties were payable only in respect of the value of the parts embodying the inventions, what justification could there be for excluding therefrom the value of the combinations of essential elements? And if the compensation is to be paid for the use of the inventions, why should compensation be denied for the use of the inventions consisting of the combinations, for that is really one of the effects of the Commissioner's award? The elements of the combinations claimed are inseparably included in the parachute equipment. The combination of the canopy and shroud lines tucked in a particular manner into the pockets at the back of the container is an example; it is not possible to separate the shroud lines attached to the canopy from the manner in which they are tucked into the pockets. The case is even stronger when account is taken of the fact that there is hardly any element that is not included in some one of the combination claims and that all are component and essential parts necessary to its working as a single safety device. There is almost complete identity between the parachute equipment and what is covered by the combination inventions. Under the circumstances there could not be a use of the inventions defined in the combination claims in Patent No. 276,782 apart from the parachute equipment and since the compensation is payable for the use of the inventions I see no reason why the value of the parachute equipment in which they are inseparably embodied should not serve as a reasonable base for the application of the rate fixed by the Commissioner. Certainly if this were a case where Switlik had to pay reasonable royalties for the use of the inventions covered by the patents, such royalties would be based on the selling price of the parachute equipment. That would have been the usual and normal method of computation. I am unable to find any reason for taking a different course in the present case and must, therefore, conclude that, when the Commissioner excluded the value of such elements as the canopy and shroud lines from the base to which he applied the

rate of royalty he considered reasonable, he acted on a wrong principle and that his resulting award cannot stand.

This leaves only the question of the quantum of compensation to be allowed. Counsel for the respondent took the view that a lump sum should be awarded for the total use of the inventions, but, in my judgment, this would not be proper, for just as each unit of parachute equipment would be an infringing article in infringement proceedings, so also there is a use of the inventions involved in the manufacture or sale of each unit and the compensation should, therefore, be fixed on a unit basis.

The Commissioner considered that a royalty based on the selling price was objectionable because of the variable factors therein over which the Crown had no control and concluded that a royalty based on the cost of production would eliminate the variable factors. Counsel for the respondent also stated that the present trend of decisions was towards using the cost of manufacture as the base for fixing royalties, but this statement is not supported by authority. In the present case the spread between the selling price and the cost of manufacture is not very great and counsel for the appellant had no objection to the cost of manufacture being used provided a proper royalty rate was used. The important thing after all is that the compensation should be a reasonable one. Undoubtedly, the usual and accepted method of determining the amount of royalties in respect of articles that are the subject of manufacture and sale is to compute them on the basis of the selling price of the article and I can see no real reason why the Commissioner, once he had fixed a rate which he considered reasonable, should not have applied it in the usual and accepted manner.

The Commissioner spoke of the royalty rate fixed by him as one-half of the percentage royalty asked by the patentee, but then proceeded to make a series of further reductions; first, by applying his reduced rate on increased volume, so that it went into effect after only 5,000 parachutes were produced; then, by applying his rate only to the cost of manufacture of the harness and pack; and finally, by a further slight reduction in reaching his flat rate of \$2.00 per unit; with the result that his final award

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works out at approximately one-eighth of the amount contended for by the appellant and 1 per cent of the selling price of the equipment. With the utmost respect to the Commissioner, I do not think this award is fair to the appellant and I find no warrant for such a low rate in the cases. If the rate fixed by the Commissioner is applied to the selling price of the parachute equipment, and the sliding scale is applied in accordance with the average of the number of units ordered from Switlik and the appellant's subsidiary, the result per parachute equipment unit will be approximately \$8.00. This amount per parachute equipment unit would, I think, having regard to all the circumstances, including wartime conditions, be reasonable compensation to the appellant for the use by Switlik of the inventions covered by the patents and the Court so finds. The result is that the appeal from the Commissioner's decision is allowed; that the award of compensation there made is set aside and an award of \$8.00 per parachute equipment unit substituted; and that the respondent's cross appeal is dismissed. The appellant is entitled to its costs of the appeal and cross appeal.

*Judgment accordingly.*