

Tax Court of Canada

Sass Manufacturing Ltd. v. Minister of National Revenue

Sass Manufacturing Limited, Appellant, and Minister of National Revenue, Respondent

Sarchuk, T.C.J.

Judgment: May 9, 1988

Counsel: *D.K. McNair* for the appellant.
T. Taylor for the respondent.

Sarchuk, T.C.J.:

1 Sass Manufacturing Limited appeals from reassessments of income tax for its 1981, 1982 and 1983 taxation years. These appeals raise two separate and distinct issues.

2 The first arises out of the fact that the appellant in its returns for those years, claimed an inventory allowance deduction pursuant to the provisions of [paragraph 20\(1\)\(gg\)](#) of the *Income Tax Act* ("Act") on all raw material and work in process inventories. The respondent disallowed that portion of the inventory allowance deduction claimed which related to the work in process inventories of certain of the appellant's "supply and install" contracts.

3 In so doing the respondent takes the position that the appellant's claim for inventory allowance has been properly disallowed on the basis that the work in process was not held by the appellant for sale or for the purpose of being processed, fabricated, manufactured, incorporated into, attached to or otherwise converted into or used in the packaging of property for sale in the ordinary course of the appellant's business within the meaning of the relevant provisions of the Act.

4 The appellant contends that the portion of the work in process material that had not been installed at the job site as at the inventory date represents inventory held for sale within the meaning of [paragraph 20\(1\)\(gg\)](#) of the Act.

5 The parties agree that the summary of the amounts involved and claimed by the appellant, set out by taxation year in paragraph 5 of the appellant's notice of appeal, accurately reflects the amounts in issue under this head.

6 The appellant is primarily a steel fabricator. It purchases steel in sheet and bar form in "stock sizes" which it cuts, forms and welds into the products ordered by its customers. The appellant's business is diversified with the biggest single product being structural steel for the construction industry. Another major area of its business is the custom fabrication of housing, machinery and equipment for a number of different industries. It produces

containers described as non-pressurized storage tanks and bins for food processors, degreasing equipment for the auto parts industry and other specialized products which call for steel to be fabricated according to the customer's specifications. Although the appellant does not consider installation to be a main part of its business in these specialized projects, because of its particular expertise, it quite frequently accepts contracts for both fabrication and installation.

7 Mr. Robert Sass is a shareholder in the appellant. He is also the corporate secretary and during the relevant period of time was employed by it as the comptroller. One of his responsibilities was the review of each job quotation, purchase order or contract and as a result he is familiar with the appellant's tendering process. Robert Sass described his understanding of the "supply and install" contracts in the following terms:

A supply contract is one where we supply goods and have no more responsibility at all in terms of the contract other than the quality of the goods. In a supply and install contract we undertake to do more with the goods after the fabrication is completed. This usually involves site work that would require some expertise that our customer felt that we could perform and that they would more or less delegate to us.

8 Robert Sass estimated that the installation portion of such a contract would typically account for 15 per cent of its value and that only rarely would it exceed 20 per cent of the total. As a general rule these contracts did not distinguish between the cost of fabrication and the cost of installation and in many instances consisted of nothing more than the "quote" to the customer which would have the appellant's standard terms and conditions imprinted on its reverse side. A copy of these terms and conditions of sale was filed as Exhibit A-1. Robert Sass had examined as many of the contracts in issue as he could find and found no variation with respect to the inclusion of the standard terms. He conceded that in many instances because the contract was for a unique item it was individually written but maintained that, without any amendment or change requested by the customer, it would be subject to the standard terms and conditions.

9 Robert Sass referred to a three-page document prepared for the appellant and captioned "Work in process on December 31st, 1980; December 31st, 1981 and December 31st, 1982 inventory" (Exhibit A-5). This document listed the contracts in respect of which an inventory allowance was denied by the respondent. Although he only made a brief reference to the individual contracts listed therein it appeared that they fell into two general categories. Typical of the first are contracts with Pioneer Hi-Bred Seed Company (Pioneer). In one such contract, subreferenced "Flora", the appellant fabricated a piece of equipment described as "bulk storage" for Pioneer. The equipment consists of a system of large tanks or bins designed to hold various sizes and grades of seed corn that has been sorted by a mechanical process and permits the producer to easily bag and fill the required product for shipment. In this contract the component parts were fabricated at the appellant's plant and then were shipped to the site, in this case in Indiana, where the unit was assembled and installed. No other contractor was involved.

10 The second category of contracts involve the appellant as a subcontractor. Robert Sass described the contracts with Elric Contractors (I.H.C. Pumphouse; St. Andrews

Residence); Kelly-Lynn Const. (Bank of Montreal); Van Reenan & Breaksma (Sarnia Arena); Manninger Bros. (Sunoco Car Wash); L.B.A. Masonry; Mar-Lin Constr. and others as instances where the appellant did not supply and install directly for a customer but worked for a general contractor who was engaged by the “end-user”.

11 To support its position that the contracts in issue were for the sale of goods evidence was elicited from Robert Sass with respect to the appellant’s delivery and billing practices. He referred to paragraph 2 of the appellant’s standard terms and conditions which provides that:

Title to all goods shall remain in the company until the goods are fully paid for unless waived by specific releases.

and stated that normally the customer was billed at the time of delivery while any work done on the site was billed subsequently. With respect to the contracts in issue it was his recollection that the customers had not been billed in the majority of cases because the material had not been shipped.

12 Mr. Denys, the appellant’s accountant, testified that initially the appellant may have claimed an inventory allowance which in some cases included goods that had already been shipped to the appellant’s customer, but the revised claim, shown in column three of Exhibit A-2, represents only that inventory actually held on the client’s premises.

13 Reference was also made to the appellant’s property insurance which, according to Robert Sass, covers the fabricated material while it is in the appellant’s plant. He asserted that it was only when it leaves the plant that it is considered by the appellant and its insurance company to be at the risk of the customer.

14 The appellant maintains that those portions of the work in process that had not been installed at the job site as of the inventory date represent inventory held for sale within the terms of [paragraph 20\(1\)\(gg\)](#) of the Act, and since the inventory remained in the appellant’s possession and no delivery or payment had been made, the requirement in the inventory allowance rules that the property be held for sale is also satisfied.

15 Mr. McNair submitted that material was the essence of the contracts in issue while the value of the labour (that is erection and installation) was marginal, being no more than 15 or 20 per cent of the total contract price on average. That being the case the contracts were clearly for the sale of goods. He referred to *Preload Company of Canada Ltd. v. City of Regina et al.* (1958), [13 D.L.R. \(2d\) 305](#) and in particular the comments of Chief Justice Culliton at pages 313-14:

Whether a contract is one for the sale of goods, or is one for work and wages depends upon the essential character of the agreement. If the City was to pay substantially for materials rather than skill, then the contract was one for the sale of goods. Notwithstanding that a high degree of skill goes into the making of the pipe, if such skill is primarily for the purpose of producing pipes for delivery to the City at a price, then the contract is one for the sale of goods: *J. Marcel (Furriers) Ltd. v. Tapper*, [\[1953\] 1 All E.R. 15](#); Cheshire & Fifoot, *Law of Contract*, 3rd ed., pp. 162-63;

Benjamin on Sale, 7th ed., pp. 166 *et seq.*; *Robinson v. Graves*, [1935] 1 K.B. 579; *Lee v. Griffin* (1856), 1 H. & N. 73, 156 E.R. 1123.

16 Mr. McNair submitted that the evidence of Robert Sass and Denys established that the bulk of each of the contracts in issue “is something other than the erection part of the contract”. Their evidence, he argued, therefore supports the proposition “that the fabrication, labour and materials and so forth are by far the major portion of each of those contracts and the erection is a much less significant part”, which leads to the conclusion that the contract is one for the sale of goods.

17 Mr. McNair further submitted that the substance, or what he described as the principal component of the contract, must be looked at and a decision made as to its nature in accordance with “the way a reasonable man would describe the contract”. He made reference to [section 2 of the *Sale of Goods Act*, R.S.O. 1970, c. 421](#) which provides:

2. (1) A contract of sale of goods is a contract whereby the seller transfers or agrees to transfer the property in the goods to the buyer for a money consideration, called the price ...

and submitted that property in goods passes when the parties intend it to pass, in this case:

Mr. Sass indicated that as far as the company was concerned their opinion was that the risk was theirs while the material was in their plant, and ceased to be theirs when it was out of sight, and the insurance coverage covers the material while only in his plant. The risk is an important element, particularly the responsibility to insure is an important element of the concept of property, a concept which is somewhat different from title.

18 In those contracts where the appellant acted as a subcontractor and tendered to supply and install a particular component, for example a loading dock or steel stairs, Mr. McNair argued that the appellant’s customers were the general contractors, and not the owners of land or structure to which the fabricated component was to be attached. Although these contracts involved work to be done on the land of the “end-user” Mr. McNair contended that upon delivery of the component to the job site and billing the general contractor, property passed to the latter by way of sale and not to the “end-user” by accession, once again leading to the conclusion that the contracts were for the sale of goods.

19 Counsel for the respondent argued that where it appeared from a consideration of the entire arrangement that the contract was one for the supply of work, labour and materials the fact that on its face it was a written contract for the sale of goods was not necessarily determinative of the issue: *Fairbanks Co. v. Sheppard*, [1952] 1 D.L.R. 417. He submitted that a simplistic reference to the standard terms and conditions, even if they formed part of each “quote” or contract as alleged, does not necessarily provide the answer whether the appellant was contracting to supply work, labour and materials or was

manufacturing goods for sale.

20 To succeed in its appeal the appellant must establish, with respect to each contract, the existence in its inventory of tangible property and, secondly, that this property was held by it for sale, or for the purposes of being fabricated, manufactured, incorporated into, attached to, or otherwise converted into or used in the packaging of property for sale in the ordinary course of the business.

21 Mr. McNair referred to the text, *Sale of Goods in Canada*, by G.H.L. Fridman, Q.C. for the proposition that the substance of a contract must be regarded and a decision made in accordance with the way a reasonable man would describe the transaction. The difficulty the Court faces is that there is no single transaction to be assessed but rather a number of contracts which on the face of it are different. The Court was invited by the appellant to draw certain necessary inferences, not from contract documents themselves but from extremely generalized statements as to the nature of these contracts. That invitation must be rejected. The situation is not similar to that which existed in *Crown Tire Service Ltd. v. The Queen*, [1983] C.T.C. 412, 83 D.T.C. 5426. In that case the appellant was engaged in a tire retreading business. The contracts it entered into and the services it provided to each customer were for all practical purposes identical in nature. In such a case a general approach may be acceptable. On the other hand, the contracts in issue have not been shown to be capable of such an approach.

22 I have considered the decisions cited by both counsel. One principle which emerges from the various judgments is that the contract in issue should be carefully reviewed to determine whether it is in substance a contract for the provision of labour and materials or a contract for the sale of goods. For whatever reason the appellant chose to deal with all of its contracts as though the essential character of each was identical. Perhaps this approach is the reason why Robert Sass' evidence lacked clarity and precision and why the individual contracts were not tendered as exhibits. In result, however, there is little evidence as to the specific terms of any of the contracts in issue from which a determination might be made whether a contract was for the sale of goods or was for work and material.

23 One example of the manner in which the contracts were presented will suffice. With reference to a contract described as "Kelly-Lynn Const. — Bank of Montreal" Sass said:

This is a mixture, there are some supply and install items here, steel stairs and supply only on the other items.

The contract other than the standard terms and conditions (which may or may not have formed part of it) is not before me.

24 On the other hand, what is clear from the evidence of Robert Sass is that in each instance the contract required the appellant to fabricate a product *and* to provide the necessary supervision and work with respect to the installation or erection of the product on the job site. What is also apparent is that the appellant's customers required the appellant to perform these services because of its particular expertise, skill and knowledge.

In fact Robert Sass' evidence as to the nature of the services provided by the appellant leads me to categorize the appellant as a custom manufacturer and installer.

25 Before the appellant is eligible to claim the inventory allowance pursuant to [paragraph 20\(1\)\(gg\)](#) of the Act it must clearly establish that the property described in its inventory was held for sale in the ordinary course of its business. If the appellant fails to establish the existence of this element it is no longer entitled to a reserve under that paragraph. It is sometimes difficult to determine whether a particular contract is properly described as a contract for sale of goods or a contract for the performance of work or service. For that reason the Court is entitled to hear clear and cogent evidence as to the nature of each individual contract. In the absence of such evidence it is not possible to reasonably conclude whether a particular contract was essentially related to the fabrication of a product, such as a bulk storage unit for delivery to the purchaser or whether the appellant's expertise and skill, both in designing and fabricating the product and in installing or erecting it were the essential elements sought by the customer. That being the case I must find that the appellant has failed to demonstrate that the respondent's assumptions were wrong and that the assessments ought to be vacated.

26 The second issue relates to the appellant's claim that certain expenditures made by it in taxation years 1982 and 1983 were qualified scientific research expenditures, with the result that it is entitled to claim a deduction for scientific research pursuant to the provisions of section 37.1 of the Act and is eligible for an additional investment tax credit pursuant to the provisions of subsection 127(5) of the Act.

27 The appellant alleges that in 1982 it manufactured and tested a machine, the Auto-Piper, designed to install storm and sewer drain pipe and in so doing incurred net expenditures of \$67,772. In 1983 it designed, built and tested a prototype "in-drain" pump and the equipment necessary to test it, thereby incurring expenses of \$3,821. Neither of these amounts was claimed or reported as qualifying scientific research expenses in the income tax returns filed by the appellant for those taxation years.

28 At the outset the Court was advised that the appellant was abandoning its appeal with respect to the costs incurred in the development of the in-drain pump. It follows therefore that the expenses incurred by the appellant with respect to this project were not expenses incurred for the purpose of scientific research and experimental development and were properly disallowed by the respondent.

29 The appellant's involvement in the Auto-Piper began in 1981 when it was approached by one George Bruinsma (Bruinsma), a professional engineer, and the President of Auto Piper Sewer Systems Inc. Bruinsma contracted with the appellant to manufacture a prototype machine which he had conceived as a means of resolving a problem in the laying of asbestos concrete sewer pipe. The machine was designed to travel over a pre-dug trench; deposit a gravel bed on the bottom thereof; place asbestos concrete sewer pipe in the trench; line up and butt connect the pipes; correct pipe butting and centring in the trench by means of a closed circuit T.V. system operated by the operator of the machine and finally to deposit and tamp gravel around and over the pipe as required. One novel design feature was a laser guided system to control the pipe level.

30 The concept was initially discussed by Bruinsma with Mr. Henk Van Giessen, the appellant's general manager and with its president, Mr. Metro Sass. Neither Metro Sass nor Van Giessen are professional engineers but both have substantial business experience in the course of which they acquired a fair amount of engineering and mechanical expertise. They were satisfied that Bruinsma's concept was feasible. They were also convinced that if the design was successful the machine would reduce the cost of installing concrete sewer pipe thereby taking advantage of the lower cost of concrete pipe. That fact would make the machine marketable.

31 On December 4, 1981 the appellant and Bruinsma entered into an agreement to fabricate a prototype (Exhibit R-1). The following clauses of this agreement are particularly relevant to the issue:

A. all design engineering and detailed drawings for fabrication to be provided by owner (George Bruinsma);

B. regular meetings to take place between owner, plant manager, and person in charge of fabrication for Sass Manufacturing Limited to assure that all aspects of this unit are discussed and all items required are approved by the owner before proceeding with fabrication;

C. all mechanical parts such as power unit, hydraulics, winches, instruments etc. are to be supplied by owner and delivered to Sass Manufacturing Limited;

D. Sass Manufacturing Limited agrees hereby to do all fabrication and management for a rate of \$23.50 per man per hour including the use of all fabrication equipment needed for this project;

H. it is further agreed that any future additional machines required are to be fabricated by Sass Manufacturing Limited on agreeable terms by both parties involved;

I. Sass Manufacturing Limited hereby agrees not to fabricate this machine for any other potential customers without the consent of George Bruinsma;

J. for the fabrication of this prototype unit, Sass Manufacturing Limited agrees to provide the following special financial terms:

(i) one third of total cost 60 days after completion of this unit and from date of invoice;

(ii) second payment shall be one third of the total cost six months from date of invoice;

(iii) final payment shall be one third of the total cost and shall be paid as soon as possible thereafter but not to exceed one year from date of invoice;

(iv) no interest will be charged for this arrangement.

32 According to Robert Sass, the preliminary sketches provided by Bruinsma,

although adequate for the purpose of outlining the concept, were inappropriate and inadequate for the construction of the machine. After some delay it was “forcibly suggested” to Bruinsma that detailed technical drawings had to be prepared and provided. As a result, R.M. Pow, Consulting Engineers were engaged by the appellant and the necessary drawings were prepared.

33 The project proceeded and at some point of time in 1982 the prototype was completed and was tested on the premises of the appellant. Although several problems were disclosed the initial results were considered satisfactory. Some changes and adjustments were made and a further field test was conducted. This test was attended by Bruinsma and Van Giessen. Robert Sass’ recollection is that the site apparently contained varying strata of soil and the prototype ran into several levels of gravel which kept collapsing into the trench. It became apparent that the prototype as designed could not handle difficult soil conditions.

34 During the same period of time the appellant realized that Bruinsma was no longer able to finance the project. His account with the appellant was in arrears, including a sizeable amount paid on his behalf to R.M. Pow for the drawings. Although Robert Sass’ testimony is imprecise as to when certain decisions were made, it appears that at or about the time of the second field test the appellant had decided to assume some of the risk of building the prototype. To that end on May 10, 1983 an offer was made by Bruinsma and Auto Piper Sewer Systems Inc. to sell shares to the appellant in the capital stock of a company to be incorporated to complete the Auto Piper project (Exhibit A-6).

35 The appellant encountered great difficulties in finalizing this arrangement with Bruinsma and in due course it became apparent that the proposed agreement would not be implemented. An attempt was made to enforce the terms of this agreement but this approach ran into a number of difficulties. Subsequently, acting upon its solicitor’s advice, the appellant accepted an alternative course, took legal action and ultimately took possession of the prototype, all plans, drawings and other material. This action was described as “basically a seizure under lien” and was made pursuant to a court order (not produced). When this order was granted Bruinsma was indebted to the appellant in an amount in excess of \$100,000.

36 Upon taking possession of the machine and drawings the appellant reviewed its position. It concluded that although the prototype could be made to work, in view of the economic recession there was no cause for optimism with respect to the future marketing of the machine and recovery of the costs incurred. As a result the project was abandoned and the prototype was salvaged for its component parts which were sold or otherwise utilized by the appellant. These events took place in 1983.

37 It was conceded by Robert Sass that the appellant’s initial intention was to build a prototype machine based on Bruinsma’s drawings and nothing more. Bruinsma was merely another customer. The appellant had nothing to do with the invention or development of the project and it was not until Bruinsma consistently failed to make payments on account as required that the appellant negotiated the share purchase arrangement of May 10, 1983 in an effort to recoup some of its costs.

38 As to the nature of the scientific research carried out some evidence was elicited from Robert Sass as to the investigation, experiments and analysis which were conducted. This was a daunting task for him and in fairness it should be noted that he was not directly involved in the project. Furthermore his expertise does not lie in the field of engineering or mechanics, so that he was not able to provide much more than a layman's view of the basic concepts and technology involved. No evidence was adduced as to the basis upon which the design was evolved by Bruinsma. Since Robert Sass did not participate in the discussions between Metro Sass, Van Giessen and Bruinsma during the course of fabrication of the prototype, he could only assume that Bruinsma and Van Giessen considered the implications of the various steps taken and tests conducted and took decisions on that basis. No records of these discussions or decisions were kept with the result that when asked whether any analysis or testing had been done as to the amount of support the prototype would require to straddle a previously dug trench, Robert Sass could only respond, "To a great degree that was done by an engineering hunch basis by Bruinsma and our General Manager." When the project was abandoned, what limited records may have existed were discarded with the result that there is absolutely no statistical or test result basis upon which one might determine where the project left off other than what might still exist "in Mr. Van Giessen's head". Van Giessen did not testify.

39 The respondent adduced evidence from Mr. R. Garth Doel, a graduate in 1953 of Queen's University with a bachelor of science degree in mechanical engineering. At the present time he is the president of Forest Machinery Co., a small engineering and prototype manufacturing company. Its expertise is in electro-mechanical design and computer control of machinery. Although originally formed to conduct research projects for the National Research Council, it is now primarily involved in design work for other manufacturers. The appellant's representative took no exception to Doel's qualifications and the Court heard his evidence as an expert in the field of mechanical engineering. His report was filed as Exhibit R-3.

40 To obtain as much relevant information as possible for his analysis the project was reviewed with Robert Sass and with Mr. Sypkes, an employee of the appellant. Doel sought information as to the nature of the initial project; what the appellant wanted to accomplish; how it carried out the project, what were seen as uncertainties and how they tried to solve them. The appellant was not able to provide overall descriptions or drawings for the intended project. There was no evidence of any hypothesis for research in the appellant's records and indeed no such hypothesis appears to have been postulated. There were no test reports, written or otherwise. The appellant had some photographs of components of the machine but none of the prototype and none relating to the problems encountered. There was no record or other material to describe any changes that were made and nothing to illustrate test observations.

41 After reviewing the available information Doel formed the opinion that the project did not constitute scientific research, and gave the following reasons for this conclusion:

1. Components of Activity:

- (a) There is no basic research in this project;
- (b) Engineering and experimenting with various components of this machine could be

applied research, had it been properly carried out, for the following reasons:

- the loadings on various components of the machine under the variety of conditions in which it will perform are unknown and are indeterminate through analysis;
 - the functional performance of several components of the machine was not previously proven and could not be determined for certain through analysis;
 - the action of the soil in the trench during the operation of the machine was not known and could not be determined by analysis alone;
- (c) The completion of assembly and field testing could be development had they been properly carried out;
- (d) There was no commercial content in this project since it was not completed.

2. Elements of Scientific Uncertainty in the Activity:

- (a) It was uncertain if the walls of the trench would support the machine while the necessary operations were performed;
- (b) It was uncertain if the concrete pipe sections could be properly aligned and butted by an operator viewing them by closed circuit T.V.;
- (c) It was uncertain if the mechanism provided to align the concrete pipe would perform properly;
- (d) An uncertainty arose in the tamping mechanism in that it did not perform properly as initially constructed. However, a reasonable amount of engineering analysis should have foreseen this problem;
- (e) An uncertainty arose in the winch mechanism for telescoping the gravel insertion tube. However, a reasonable amount of engineering analysis should have foreseen this problem;
- (f) The level of uncertainty for the above is moderate.

3. Technology Advances:

The technological advancement being sought was to produce a machine which would reduce the labour content in laying concrete sewer pipe to the point where its installed cost could compete with plastic sewer pipe. No technological advancement was achieved.

4. Uniqueness of Research:

The overall combination of components made this machine unique. Although the action of each major component of the machine should have been predictable, the interaction of this number of components is not so readily predictable.

5. Experimental Approach:

The systematic application of the scientific method was not performed. No records were kept of test observations. No records are available of machine modifications or reasons for modifying. There is no evidence that systematic test procedures were established.

There is no evidence that thorough engineering analysis was carried out. It was not possible to trace their trial steps and progress.

6. Commercial Content:

The prototype was built to commercial scale and if successful would have had commercial content. However, since it was not successful to commercial content exists.

7. Scientific Experience of the Staff:

No one assigned to this project from Sass Manufacturing Ltd. had proper qualifications, either by education or experience, to carry out this research.

George Bruinsma, P.Eng., may have had suitable education and experience, however, no record of his qualifications was available. It was evident that he was either not capable or unwilling to produce the manufacturing drawings for this project.

R.M. Pow Consulting Engineers would be qualified to carry out this research. There are, however, notes on their drawings that they did not contribute to the concept of the machine and that they take no concept responsibility. No one from R.M. Pow was present at the field tests.

8. Nature Data Collected:

No data was collected and preserved which would be useful for further work on this or similar concepts.

9. Conclusion:

This project is ineligible as scientific research because:

- the project was not started nor carried out in a scientific fashion;
- no proper records were kept;
- nothing was achieved to either prove or disprove concepts or hypothesis.

42 None of these conclusions were seriously challenged on cross-examination.

43 It is the appellant's position that the expenses incurred in the 1982 taxation year can properly be claimed by it pursuant to section 37.1 of the Act. Mr. McNair argued that the appellant's involvement in the Auto-Piper project satisfied the definition of "scientific research" set out in Income Tax Regulation 2900. More precisely it fell into the category of development, being the use of results of basic applied research for the purposes of creating

a new device or product. He contended that the lack of written material was to be viewed in the context of work being carried out by a small company where attention to such detail was precluded by limited staff and time.

44 Counsel for the respondent contends that the appellant's claim for an additional allowance for scientific research and experimental development pursuant to section 37.1 of the Act and for an investment tax credit pursuant to subsection 127(5) of the Act is properly disallowed on the basis that the expenses associated with the manufacture and testing of the Auto-Piper were not expenses incurred on account of scientific research and experimental development. Counsel further contended that even if they were such expenses, those expenses were not incurred by the appellant in the 1982 taxation year, but rather were expenses incurred by a customer for whom the prototype was manufactured. Mr. McNair's response was that section 37.1 of the Act requires only that a qualified expenditure be made by the appellant in the year. Since the expenditures were not in fact paid for by Bruinsma then or later (although charged to him), for the purposes of this subsection the appellant could properly be considered as having made those expenditures.

45 I do not agree. To be entitled to claim an additional allowance for scientific research under the provisions of section 37.1 of the Act, the appellant must establish that it made, in the taxation year, a qualified expenditure being an expenditure in respect of scientific research carried on in Canada. The evidence discloses that although many of the project expenses incurred in 1982 were paid by the appellant, they were paid on behalf of their customer Bruinsma, who in due course was billed for them. It was only when Bruinsma failed to pay these accounts that the appellant took legal action, which step was not taken until late 1983 or perhaps 1984. There is very little evidence as to the nature of the action taken and the best that can be gathered from the testimony of Robert Sass is that the prototype machine was seized pursuant to some form of lien action. There is no evidence whatsoever that the appellant acquired any rights to the concept or the design.

46 The contract between Bruinsma and the appellant is quite specific. The appellant was required to do no more than custom build a prototype in accordance with specifications provided by Bruinsma. All of the subsequent contracts entered into by the appellant, for example the contract with R.W. Pow for technical drawings, were undertaken on behalf of Bruinsma. Bruinsma was a customer and the appellant had no right to his concept or to the results of his research and investigation. Its sole entitlement was to be paid in accordance with the contract (Exhibit R-1). The evidence does not support a finding that qualified expenditures for scientific research were made by the appellant in the 1982 taxation year.

47 As to whether this project qualified as scientific research I refer to Income Tax Regulation 2900 where for the purposes of section 37.1 the term "scientific research" is defined as follows:

2900. For the purposes of this Part and paragraphs 37(7)(b) and 37.1(5)(e) of the Act, "scientific research" means systematic investigation or search carried out in a field of science or technology by means of experiment or analysis, that is to say,

(a) basic research, namely, work undertaken for the advancement of scientific

knowledge without a specific practical application in view,

(b) applied research, namely, work undertaken for the advancement of scientific knowledge with a specific practical application in view, or

(c) development, namely, use of the results of basic or applied research for the purpose of creating new, or improving existing, materials, devices, products or processes,

and, where such activities are undertaken directly in support of activities described in paragraph (a), (b) or (c), includes activities with respect to engineering or design, operations research, mathematical analysis or computer programming and psychological research, but does not include activities with respect to ...

48 The evidence falls far short of establishing the existence of any systematic investigation or search carried out in a field of technology by means of experiment or analysis. In my view Regulation 2900 requires an appellant to adduce cogent evidence of such investigation or search. Systematic investigation connotes the existence of controlled experiments and of highly accurate measurements and involves the testing of one's theories against empirical evidence. Scientific research must mean the enterprise of explaining and predicting and the gaining knowledge of whatever the subject matter of the hypothesis is. This surely would include repeatable experiments in which the steps, the various changes made and the results are carefully noted. There is no evidence of such an approach in the case at bar, either in the context of applied research or development. The appeal on this issue cannot succeed.

49 With respect to the appellant's claim for an inventory allowance deduction certain of the contracts were described by Robert Sass as "supply" contracts only. Counsel for the respondent did not challenge this assertion. Therefore the appeal will be allowed in respect of the following "supply only" contracts identified in Exhibit A-5:

As at December 31, 1980:

Omnitech -- Cargill grain dryers	\$27,054
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As at December 31, 1981:

Tempo Systems -- CIMA supports	200
L.B. Howe -- Grondon pumps	8,585
Ross Stokes -- discharge pipe	89
Ministry of Environment -- covers	1,185
Des Marais -- motor	329
L.B. Howe -- Morown pump	17,343

As at December 31, 1982:

AWK Industries -- tank extension	367
Sunbrite Canning -- re-work material	1,862
Libby's -- cooler	700
Libby's -- cooler	994
John Dick -- pump	1,097

50 In all other respects the reassessments are confirmed.

Appeal allowed in part.