Highland Foundry Ltd. v. R.

Highland Foundry Ltd. v. Her Majesty The Queen

Tax Court of Canada

McArthur J.T.C.C.

Judgment: August 15, 1994

Year: 1994

Docket: Court File No. 92-264

Counsel: *T.C. Armstrong* for the appellant.

T. McAuley and *E. Junkin* for the respondent.

The appellant was a family operated foundry business. Metal castings were produced by the appellant by pouring a molten metal into cold molds designed to create their finished products.

The molds were made from "green sand" which, prior to 1985, was imported into Canada from the United States. As a result of the molten metal and sand, the surface of the sand became contaminated and thereafter was of limited use.

The appellant commenced a process of research and experimentation to develop a system to reclaim the otherwise contaminated sand for reuse in the casting process. A prototype was built for trial purposes with the anticipation that it would be successfully used in the day to day operation of the foundry. By late 1987 the sand refiner was completed.

The new system improved the operating costs of the foundry by reducing the need to purchase new sand from the U.S., cutting down on the need to carry and dump the contaminated sand, and having environmental benefits. The model produced was a first in the industry and was patented in the U.S. on December 1, 1987 and in Canada on February 21, 1989. Following completion of the prototype, the appellant continued to use the sand refiner in the foundry business.

That use continued at the time of trial. The capital costs in question—$10,851, $104,084 and $90,148 in the 1985, 1986 and 1987 taxation years, respectively—were incurred in connection with the development of the sand refiner. The issue was whether the appellant should be entitled to claim the aforementioned capital costs for the purpose of the investment tax credit. At trial, the

Crown acknowledged that the research to develop the refiner was valid scientific research and experimental development ("SR&ED"). However, the Crown contended that the expenditures incurred by the appellant were not all or substantially all attributable to prosecution of SR&ED when one considered the useful life of the capital assets.

The focus of the Crown's argument was that because the capital equipment continued in use for many years after the expenditure was made, it was not all or substantially all attributable to the prosecution of SR&ED and that it was never a prototype. The central question was therefore over what period the determination of "all or substantially all" in clause 37(7)(c)(ii)(A) was to be made.

Held:

The time frame over which "all or substantially all" is to be made is the time period over which the prosecution or construction is taking place, not the full useful life of the equipment. In this case, at the time the expenditures were incurred for the prototype refiner and lab equipment, the expenditures were made for the prosecution of or in the pursuit of SR&ED. The expenditures would not have been incurred but for the SR&ED. The appellant should not be penalized because the equipment continued to be used in the production process. Appeal allowed.

Cases referred to:

Spectron Computer Corp. v. M.N.R., [1993] 2 C.T.C. 3148, 93 D.T.C. 1473;

Johns-Mansville Canada Inc. v. The Queen, [1985] 2 S.C.R. 46, 2 C.T.C. 111, 85 D.T.C. 5373.

***McArthur J.T.C.C.*:**

1 The appellant appeals the reassessments of the Minister whereby the Minister disallowed certain capital costs incurred by the appellant for scientific research and experimental development in its claim for investment tax credits in the amounts of $10,851, $104,084 and $90,148 in the 1985, 1986 and 1987 taxation years, respectively. The respondent withdrew its disallowance of the current expense of $26,888 in 1987.

2 The facts set out in the appellant's written argument are not disputed by the respondent.

3 The appellant is a family operated foundry business in Surrey, British Columbia. Metal castings are produced by the appellant by pouring a molten metal into cold molds designed to create their finished products. For the most part, the castings are used in the pulp and paper industry. The molds are made from “green sand” which is imported into Canada from the United States at a cost of approximately $113 per ton.

4 Prior to 1985 the appellant purchased the sand, which was used in the production of castings, from U.S. suppliers. As a result of the interface of the molten metal and sand, the surface of the sand became contaminated and thereafter was of limited use. The appellant, with the assistance of an employee engineer, commenced a process of research and experimentation to develop a system to reclaim the otherwise contaminated sand for reuse in the casting process. A prototype was built for trial purposes with the anticipation that it would be successfully used in the day to day operation of the foundry. By late 1987 the sand refiner was completed. The new system improved the operating costs of the foundry by reducing the need to purchase new sand from the U.S., cutting down on the need to carry and dump the contaminated sand, and having environmental benefits. The success of the sand refiner was not a certainty. Its development involved a calculated risk. The model produced was a first in the industry and was patented in U.S. on December 1, 1987 and in Canada on February 21, 1989. Following completion of the prototype, the appellant continued to use the sand refiner in the foundry business. That use continues to the present. The $10,851 expenditure in 1985 related to the cost of lab equipment used during the research phase to monitor whether the sand was contaminated. It is admitted by the Minister that the lab equipment was used solely for testing until the sand refiner was put into regular production where it was used for quality control testing. The other capital expenditures for 1986 and 1987 were for the construction of the prototype sand refiner. The claim for deductions at issue was not made until 1989, being subsequent to a change in accountants by the appellant.

5 The respondent acknowledges that the research to develop the refiner is a valid scientific research and experimental development ("SR&ED") for the purposes of the *Income Tax Act*, R.S.C. 1952, c. 148 (am. S.C. 1970–71–72, c. 63) (the "Act"). It is not disputed that the capital expenses claimed by the appellant were used in the research and development of the sand refiner.

Statutory provisions and Interpretation Bulletins

6 The relevant statutory provisions of the *Income Tax Act* are paragraph 37(1)(b), clause 37(7)(c)(ii)(A); subsections 2900(2) and (3) of the Income Tax Regulations, all in effect for the 1985, 1986, and 1987 taxation years, cited in part as follows:

37. Scientific research and experimental development.

(1) Where a taxpayer files with his return of income under this Part for a taxation year a prescribed form containing prescribed information, carried on a business in Canada and made expenditures in respect of scientific research and experimental development in the year, there may be deducted in computing his income for the year the amount, if any, by which the aggregate of

> (b) such amount as may be claimed by the taxpayer not exceeding the lesser of
>
> > (i) the expenditures of a capital nature made in Canada (by acquiring property other than land) in the year and any previous year ending after 1958 on scientific research and experimental development relating to the business and directly undertaken by or on behalf of the taxpayer, and
> >
> > (ii) the undepreciated capital cost to the taxpayer of the property so acquired as of the end of the taxation year (before making any deduction under this paragraph in computing the income of the taxpayer for the taxation year),

(7) *Definitions*.—In this section,

> (c) references to expenditures on or in respect of scientific research and experimental development
>
> > (ii) where the references occur other than in subsection (2), include only

(A) *expenditures each of which was an expenditure incurred for and all or substantially all of which was attributable to the prosecution, or to the provision of premises, facilities or equipment for the prosecution, of scientific research and experimental development in Canada....*

[Emphasis added.]

7 Regulation 2900 reads as follows:

2900(1) For the purposes of this Part and paragraph 37(7)(b) ... of the Act, "scientific research and experimental development" 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

(e) quality control or routine testing of materials, devices or products;

(h) the commercial production of a new or improved material, device or product or the commercial use of a new or improved process. ...

8 Interpretation bulletin IT-151R3 which applies to the relevant years and in interpreting clause 37(7)(c)(ii)(A), provides in part at paragraphs 21 to 23:

21. ... It is the Department's view that the “all or substantially all” test will normally be met if the property (i.e., the asset) acquired as a result of the capital expenditure is to be used at least 90 per cent of the time throughout the expected useful life of the asset for SR&ED in Canada. The test may also be met if 90 per cent of the value of the asset will be consumed in or attributable to the time during which it is used for SR&ED. While this determination is usually made at the time a particular expenditure is made, the Department will normally consider subsequent events as evidence of the taxpayer's intention at the time the expenditure was made. Furthermore, in interpreting the expression “all or substantially all” with regard to capital expenditures, the Department looks beyond the use of the asset in the year in which the expenditure is made to the intended use of the asset over its useful life. Thus, a taxpayer seeking to deduct such an expenditure pursuant to section 37 must demonstrate that at least 90 per cent of the expenditure or value of the asset acquired will be consumed during the time the particular asset is used for SR&ED.

22. ... As for other property, such as a piece of equipment, which is used partly for SR&ED and partly for other purposes, such property will only meet the requirement that the related expenditure was “incurred for and all or substantially all attributable” to SR&ED if it is used for other purposes for no more than 10 per cent of the time. If an existing asset is used temporarily for SR&ED, the direct costs, including maintenance and repairs, are deductible under paragraph 37(1)(a), but no deduction for the cost or undepreciated capital cost of that asset is allowable under paragraph 37(1)(b).

23. Expenditures are not deductible under section 37 for SR&ED projects that can reasonably be expected to result in the acquisition of property that will be used in the taxpayer's business or that will be sold, since such expenditures are not all or substantially all attributable to SR&ED. However, as described in Information Circular 86-4R, provided the expenditures relating to the SR&ED elements of such projects can be segregated from those which would normally be associated with producing the property if the technology had already existed the relevant portion of such expenditures can be deducted under section 37.

9 Interpretation Bulletin No. IT-151R4 is dated August 16, 1993 and indicates that it applies generally to expenditures on SR&ED incurred after December 15, 1987. It is essentially the same as the above with determination being elaborated upon as follows:

The determination of whether a capital expenditure is all or substantially all attributable to SR&ED is usually made at the time the property is acquired. In making this determination, the intended use of the property in the year in which the expenditure was made as well as over its useful life will be considered. Subsequent use of the property also provides evidence of the taxpayer's intention at the time the expenditure was made. However, where the subsequent use is contrary to the taxpayer's stated intention, the onus is on the taxpayer to support the intention that the cost of the property was to be all or substantially all attributable to SR&ED in Canada....

10 Information Circular IC 86-4R2, dated August 29, 1988, at paragraph 7 states as follows:

7. Considerations in Determining when an Experimental Development Project is Complete

7.1 The development of a new or improved product or process through a program of experimental development can be conceptualized as occurring in five stages:

> (1) The definition of a concept or technological hypothesis together with a statement of corresponding technological objectives.
>
> (2) The definition of a systematic program to achieve the technological objectives defined in (1). As far as is possible, this will describe a technological development plan or program, including various subprojects, milestones, and steps along the development path.
>
> (3) The process or product is developed to the prototype or pilot stage for experimental or technical trial purposes. That is, prototypes are to provide a test of the feasibility of the concept or hypothesis. It is possible that the construction of a whole series of pilots and prototypes may be involved as problems are met and either overcome or circumvented. It may be that in this phase of the development, the original objectives have to be modified significantly or perhaps even changed entirely, depending upon the technological opportunities which become apparent; however, such cases should be regarded for the purposes of regulation 2900 as a series of scientific research and experimental development projects with distinct and documented technological objectives.

11 Interpretation Bulletins and Information Circulars, while not to be considered law can be very useful in interpreting the meaning of relevant legislation.

Issue

12 The issue is whether the disallowed capital expenditures were “all or substantially all attributable to the prosecution of scientific research and experimental development” as the phrase is used in subsection 37(7) of the Act and over what period the determination of “all or substantially” is to be made.

Position of the appellant

13 The appellant argues that the capital expenditures related to the construction of a sand refiner were scientific research and development expenditures and eligible for deduction from income under the relevant legislation and regulations. The focus of the Minister's argument is that because the capital equipment continued in practical use for many years after the expenditure was made, it was not all or substantially all attributable to the prosecution of SR&ED and that it was never a prototype.

14 There was clearly risk and uncertainty as to success involved in this type of SR&ED. Hindsight is 20–20 when reviewing a SR&ED experiment and the ultimate result appears successful after the fact. In order to test the prototype sand refiner, it is obvious that at least one load of sand would be required for SR&ED purposes. The lab equipment was an integral part of the SR&ED process and therefore the capital expense incurred in the amount of $10,851 qualifies for the ITC. Revenue Canada's view is that the key issue is whether there is a technological uncertainty still to be overcome, or whether this stage can be carried out through standard practice. There was clearly uncertainty that the taxpayer had to overcome and it was not until late 1987 that it was determined that the sand refiner could be used in production. Prior to the development of the green sand refiner, there was no known technology which would enable the taxpayer to reuse the sand which the taxpayer used to produce castings. The fact that the taxpayer produced the first known working model of the green sand refiner in the area demonstrates that very significant technological uncertainty was overcome. Evidence of both technological advancement and uncertainty can be demonstrated since the refiner was subsequently given both U.S. and Canadian patents.

15 Had the taxpayer been unsuccessful in the development of the green sand refiner, its scientific research and investment tax credit claims would probably not have been challenged. This result seems irrational since it causes success to be penalized and failure rewarded. Revenue Canada has clearly stated in paragraph 7.2 of IC 86-4R2, that if the process or product is developed to the prototype stage, such work carried out is eligible when an experimental development project is involved. It would be illogical for a taxpayer not to use a successful working prototype model in its business (where possible) as it would ignore the commercial reality that the costs of developing a prototype can be very high.

16 The appellant argues that on the reading of clause 37(7)(c)(ii)(A) of the Act, it is all or substantially all of the expenses which are attributable to the prosecution of the SR&ED at the time that the research is ongoing. It is not appropriate to examine the circumstances of the taxpayer years after the prosecution of the SR&ED is undertaken. The appellant states that it was not until September of 1987 that it was determined that the sand refiner could be used in the regular production process, the prototype having been tested, changed and improved on before it could be used in regular production.

Position of the respondent

17 The respondent contends that the appellant is not entitled to claim the capital expenditures for the purpose of the income Tax Credit (“I.T.C.”) because the expenditures incurred by the appellant were not all or substantially all attributable to prosecution of SR&ED when one considers the useful life of the capital assets. The focus of the Minister's argument is that because the capital equipment continued in use for many years after the expenditure was made, it was not all or substantially all attributable to the prosecution of SR&ED and that it was never a prototype. The Minister argues that they should not be given the accelerated write off rights provided in the legislation for SR&ED but should be classified as capital equipment and be permitted the graduated deduction allowance allowed under the Act and Income Tax Regulations.

Analysis

18 Rules of statutory interpretation require words to be interpreted in their ordinary and grammatical sense unless there is something in the context or object of the statute which suggests that the words have a meaning different from their ordinary grammatical sense. While the Interpretation Bulletins and the Information Circulars are not statutes, this rule seems cogent with respect to their interpretation as well. *The Concise Oxford Dictionary* (Seventh Edition) defines "prototype" as follows:

n. an original thing or person in relation to a copy, imitation, representation, later specimen, improved form, etc; trial model, preliminary version, esp. of aeroplane etc. ...

19 By considering this definition the sand refiner easily falls within the meaning of "prototype", regardless of the fact that the appellant has continued to use it in its business. The refiner is the original form of the process. The refiner has been patented, it is the trial model, a model which fortunately for the appellant worked and continues to work. It has provided a test of feasibility of the concept and, should be regarded for the purposes of regulation 2900(1)(c) as a SR&ED project with "distinct and documented technological objectives".

20 I would have to agree with the appellant's argument that simply because an asset has value beyond its experimental stage does not disentitle it to SR&ED expenses at that point in time.

21 The appellant refers to Interpretation Bulletin No IT-151R4 to argue that the "90 per cent rule" for the determination of "all or substantially all"is to be applied at the time the property is acquired and not over the useful life of the asset and that had the project not been successful, the expenditure would have been permitted as SR&ED.

22 The appellant adds that no words in subsection 37(7) can be construed to extend the meaning of all "or substantially all in the prosecution" to the "useful life" of the capital asset, and submits that the reference in IT-151R4 should relate to the intended use of the property in the year in which the expenditure was made.

23 In turning to jurisprudence for the meaning of "all or substantially all" the following from Taylor J.T.C.C. in *Wood* v *Minister of National Revenue,* [1987] 1 C.T.C. 2391, 87 D.T.C. 312 at page 2391 (D.T.C. 313) is relevant to the present instance:

Clearly the term “substantially all” does not lend itself to a simple mathematical formula. Further it would seem to me that any particular definition of “substantially” would be only valid with reference to the specific context in which it is found.

24 The determination of whether the expenditure incurred all or substantially all for SR&ED must be made at the time the money was actually expended and not determined years later with the benefit of hindsight.

Intention

25 The Minister argues that reference must be given to the intention of the taxpayer at the time the expenditure is made. The full size model and the expense incurred are suggestive of the intention to use the refiner in production once the experimental phase was completed.

26 The future consideration of the taxpayer's intention with respect to the capital equipment seems irrelevant, especially in light of subsections 37.1(3) and (4) which refer to the disposition of research property in the specific taxation year. It is unlikely that the legislature intended that the subsections apply only if the project had failed and the capital equipment rendered obsolete.

27 The case of *Spectron Computer Corp. v. Minister of National Revenue*, [1993] 2 C.T.C. 3148, 93 D.T.C. 1473 (T.C.C.), can be compared to the present case. In *Spectron* the Minister had denied the taxpayer a portion of the investment tax credit (I.T.C.) in respect of SR&ED. The SR&ED activities were focused on the eventual earning of income. Kempo, TCCJ stated at page 3155 (D.T.C. 1478):

The ostensible anomaly is resolvable by the contemporary words-in-total-context approach which has as its focus the determination of the object and purpose of these provisions. The law is not restricted to a literal and virtually meaningless interpretation where the words employed will support, on a broader construction, a conclusion which is workable and in harmony with the evident purposes of the Act. ...

28 Having stated her conclusion Judge Kempo added the following remarks at page 3156 (D.T.C. 1479):

The above analysis and conclusions represent a workable solution, avoid anomaly and are in keeping with the legislative object, purpose and language of the Act and the Regulations. Even if this approach may well have stretched the statutory language employed, it avoids absurdity and gives effect to the obvious purpose of the provisions being interpreted.

29 Successful SR&ED in the present case would render the provisions “virtually meaningless” as the accelerated deduction would be available only where the project failed or was abandoned. The interpretation of “useful life” would reduce the likelihood that the taxpayer would purchase large, long-term equipment that could be used in other areas of the plant or business upon failure; instead temporary trial units would be purchased where it had yet to be determined if the research would be successful. This would, in itself, result in waste and increased deductions where the SR&ED was virtually certain to be successful because the taxpayer would utilize an asset that could be written off immediately and then purchase a “long-term” asset to be used in production. This is not the intention of the provision, instead it is the encouragement of SR&ED.

30 I agree with the appellant's position that there are no words in subsection 37(7) that can be construed to extend the meaning of “all or substantially all in the prosecution” to the “useful life” of the capital asset.

31 It is clear that the meaning of the sections must be interpreted with reference to their ordinary grammatical sense, unless that would lead to some absurdity. Clause 37(7)(c)(ii)(A) uses the words:

... expenditure incurred ... which was attributable ... to the provision of ... equipment for the prosecution, of scientific research and experimental development. ..

32 The plain meaning of these words include money spent on equipment in reference to the pursuance or carrying on of SR&ED. The appellant certainly incurred expenses which are directly attributable to or refer to carrying out or prosecuting the construction of the refiner which was the first of its kind and can be identified as SR&ED. The expenditures were therefore incurred for the purpose of pursuing SR&ED as the taxpayer would not have made the expenditure had it not wanted to develop the refiner. The expenditures were causally connected to the provision of equipment for SR&ED. Counsel for the respondent submitted that to meet the requirements of section 37 and the 90 per cent rule that the Minister adopts, the expenditure for SR&ED must relate to the full useful life of the equipment of the capital asset.

33 The appellant's counsel stated that to meet the requirements of section 37, the expenditure must have been incurred for and attributable to "the prosecution of SR&ED" such that the determination is made at the time when the prosecution is ongoing (because an asset could clearly be acquired at a time in which it was not to be used only in the prosecution of the research). The time frame *over which* "all or substantially all" is to be determined is, therefore, not clear from the legislation. The ambiguity in the statute must be resolved in favour of the taxpayer and the time frame for the determination of "all or substantially all" must be made over the period that the prosecution or construction was taking place. *Johns-Mansville Canada Inc. v. The Queen*, [1985] 2 S.C.R. 46, 2 C.T.C. 111, 85 D.T.C. 5373, at page 72 (C.T.C. 126, D.T.C. 5384), states:

Such a determination is, furthermore, consistent with another basic concept of tax law that where the taxing statute is not explicit, reasonable ambiguity resulting from lack of explicitness in the statute should be resolved in favour of the taxpayer.

34 This approach is common sense.

Conclusion

35 In general subsection 37(1) of the Act permits a taxpayer carrying on a business in Canada during a taxation year to deduct, in computing his income, amounts expended for SR&ED in the year the expenditure was made. Clause 37(7)(c)(ii)(A) provides that expenditures on SR&ED include only expenditures incurred for and all or substantially all attributable to or related to the carrying out of SR&ED.

36 I find that, at the time the expenditures were incurred for the prototype refiner and the lab equipment, the expenditures were made for the prosecution of or in the pursuit of SR&ED. The expenditure would not have been incurred but for the SR&ED. The expense was incurred to build a prototype research model refiner. This was a first of its kind and patented in the U.S. and Canada by the taxpayer.

37 The taxpayer should not be penalized because the prototype refiner and lab equipment have continued to be used in the day to day operation of the appellant's foundry business. I find that the expenditure was incurred “all or substantially all” for SR&ED. This includes the capital expenditures of $11,688, $111,148 and $95,151 in 1985, 1986 and 1987 respectively. The purpose for which the expenditure was incurred is determined at the time of the expenditure without the benefit of hindsight. It should not be determined over the life of the capital asset where the taxpayer is fortunate enough to be able to use the prototype after the SR&ED has been completed. I do not feel that the taxpayer should not be permitted to take advantage of an I.T.C. because the equipment continues to be used in the production process.

38 For these reasons the appeals are allowed with costs.

Appeals allowed.