DECISION OF THE COMMISSIONER

REISSUE - S. 50: Added Matter Same Invention Rules 52 and 53

The grounds that the added matter was admissable in the original application only as a supplementary disclosure and that failure to file it is not a defect within S. 50(1), and that there was no intention to claim it, reversed. Affidavit shows that the matter added to the disclosure and claims was well known and does change the actual invention. NOT

FINAL ACTION: Grounds reversed.

IN THE MATTER OF a request for a review by the Commissioner of Patents of the Examiner's Final Action under Section 46 of the Patent Rules.

AND

IN THE MATTER OF a patent application serial number 040,555 filed January 20, 1969 for an invention entitled:

REDUCTION OF STAINLESS STEEL

Patent Agent for Applicant:
Messrs. C. Harold Riches Associates,
Toronto, Ontario.

This decision deals with a review by the Commissioner of Patents of the Examiner's Final Action rejecting the Petition for reissue. The request was made in accordance with Section 46 of the Patent Rules.

Reissue application 040,555 was filed January 20, 1969 in the name of W. Bleloch and refers to "Reduction of Stainless Steel". The Petition reads as follows:

(1) That your Petioner is the patentee of Patent No. 766,171 granted on the 29th day of August 1967 for an invention entitled "Reduction of Stainless Steel".

(2) That the said patent is deemed defective or inoperative by reason of insufficient description or specification and by reason of the patentee having claimed less than he had a right to claim as new.

(3) That the respects in which the patent is deemed defective or inoperative are as follows: in the original Canadian Patent No. 766,171, the described and claimed method of production of ELC stainless steel included the step of simultaneously introducing an iron ore slag and a reductant alloy of iron and silicon into a ladle. The reductant alloy was described and claimed as being introduced into the slag in a solid crushed state. The state of the reductant alloy should not however, have been so limited but rather should have included a description of, and claims directed to, the introduction of the reductant alloy in a molten state.

(4) That the error arose from inadvertence, accident or mistake, without any fraudulent or deceptive intention in the following manner: The inventor of the instant invention, William Bleloch, was employed by the applicant as a consultant engineer and metallurgist. The applicant instructed its Patent Agents in the Republic of South Africa to prepare a patent application in respect of the instant invention. The Patent Agents held preliminary discussions with the inventor and based upon these discussions provisional patent applications were lodged in the Republic of South Africa to cover the invention. At the time of such preliminary discussions, the question of the various suitable states which the reductant alloy of iron and silicon could take was not considered. Further discussions took place between the Patent Agents and other employees of the applicant who were acquainted with the instant invention to agree upon the form of the complete specification for the Republic of South Africa, and other countries. During these discussions, it was decided that the reductant alloy should be described as being in a solid crushed state when added to the ladle. Consideration was not given to the possibility that the reductant alloy could be added in a molten state. The inventor was not involved in these discussions, he being involved in other research work. The complete specification which was filed in Canada and matured to patent No. 766,171 was based upon these further discussions. The limitation of the state of the reductant alloy in the complete specification did not come to the attention of the inventor until after the filing of the complete specification in Canada. The inventor was aware that the reductant alloy could be added to the ladle in a molten state and had, in fact, performed experiments to establish this fact well before the filing of the Canadian complete specification. The inventor informed the Patent Agents of this fact and the Patent Agents immediately prepared and lodged with the

Patent Office of the Republic of South Africa an application for a Patent of Addition to include the use of a molten reductant. The Patent Agents erroneously assumed that such an application for a Patent of Addition formed the proper bases for protection in convention countries including Canada at a later date. The Patent Agents did not discover that, in relation to Canada, the assumption was in error until after Canadian Patent No. 766,171 had issued.

(5) That knowledge of the new facts stated in the amended disclosure and in the light of which the new claims have been framed was obtained by your Petitioner on or about the months of April and May 1967 in the following manner: The corresponding British application No. 12719/64 was involved in opposition proceedings at which time the inventor, William Bleloch was again brought into discussions with the Patent Agents respecting the instant invention. It was at this time that the inventor informed the Patent Agents that the reductant alloy could be added in a molten state. Your Petitioner was advised of this fact by the Patent Agents and your Petitioner immediately advised the Patent Agents to make applications for a Patent of Addition to include the use of a molten reductant. This application was lodged with the Patent Office of South Africa on May 9, 1967. The Patent Agents did not discover until about the month of May 1968 that the South African application for a Patent of Addition did not form the basis for protection in Canada.

In the examiner's action of March 24, 1970 he stated tha the applicant had not shown a satisfactory reason for the grant of a reissue patent and also that new matter was added to the application. The applicant in his response of Novembe 25, 1969 argued:

> We wish to point out however that there cannot be any invention in using a molten reductant when it has been disclosed that a solid crushed reductant is effective. One would be obvious in the light of the other and would immediately occur to one skilled in the art. It is therefore submitted with respect that the addition of reductant in a molten state is part of the same invention and not a new invention.

In the Final Action dated June 29, 1970 the examiner stated:

Reissue is not permitted for the purpose of adding new matter such as has been incorporated on page five lines 4 to 21 and in the claims of the reissue application. Matter of this nature may only be added to an application in the form of a Supplementary Disclosure; but the entry of a Supplementary Disclosure is not permitted after the application has been formally allowed.

There is no evidence in the above communications supporting the contention that the applicant intended to claim in the original patent what he claims in the reissue application. Therefore, Canadian Patent 766,171 is not deemed to be defective or inoperative by reason of the patentee claiming less than he had a right to claim as new, due to inadvertence, accident or mistake and the application for reissue is refused.

In the applicant's action of September 17, 1970 in which he asked for a review by the Commissioner of Patents he argued:

The applicant submits that the re-issue application is not open to objection on the grounds stated by the Examiner and in support of this submission, submits a further Affidavit sworn by the inventor Dr. William Bleloch.

The Examiner contends that the statement that the reductant can be added in a molten state is the addition of new subject matter. It is the applicant's respectful submission however that it can be reasonably inferred from the statement of Page 4 already referred to that the reductant can also be added in a molten state. In paragraph 8 of the Affidavit of Dr. Bleloch submitted herewith it is stated that:

I believe it is perfectly clear to skilled metallurgists in the art to which the invention relates that solid crushed and molten reductants can be interchanged but that the latter will require somewhat more careful control of operating conditions.

I further believe that any skilled metallurgist on being presented with the disclosure of the use of solid crushed reductants in the process of the invention would appreciate that a molten reductant could also be used in the process.

The reason for the use of a solid crushed reductant is merely because it is easier to handle and control in this state than when it is molten and this gives obvious economic advantages.

It is therefore clear that the equivalency of solid crushed and molten reductants is well known in the art and a skilled metallurgist knowing that the reductant can be added in a solid state would know that it could also be added in a molten state. In fact, solid crushed reductant is easier to control than molten reductant and therefore all experiments prior to the date of application were naturally conducted with solid crushed reductants. This is because the reaction is inherently exothermic. Molten reductant would be an obvious substitution for solid crushed reductant to a skilled metallurgist but if the reductant were added in a molten state, more careful control of operating conditions would be required.

If the application which matured to the original patent were still pending, it is submitted that the application could be amended to include the statement that the reductant could be added in a molten state. Rule 52 would not prohibit such an addition and there would be no necessity to submit a supplementary disclosure. Similarly, it is submitted the present petition is not an attempt to add new subject matter to the original patent.

I have reviewed the grounds of rejection set forth by the examiner, as well as all the arguments set forth by the applicant and I am satisfied the rejection is not well founded.

I find I cannot overlook the affidavit by the inventor, which substantiates the petition, in which he states:

I am aware of the Petition for reissue which has been lodged on behalf of Rand Mines Limited.

I hold the degree of M.SC.(Rand) and Ph.D.(London), in Chemical Engineering, and am a Member of the South African Institute of Mechanical Engineers, a Fellow of the Royal Institute of Chemistry, London, a Member of the Institute of Chemical Engineers, London, and a Member of the Iron and Steel Institute of London, and have been since 1932.

I was never aware, until about April 1967, that this patent or the others corresponding thereto in various other countries were limited to the fact that the reaction was effected only with solid crushed reductant.

This limitation was brought to my attention by the Patent Agent acting for Rand Mines Limited when I was consulted during opposition proceedings in the

prosecution of the corresponding British Patent Application.

I was not consulted on the final form of the specification for Patent No. 766,171.

It was my intention that the invention should include both the use of a molten reductant and a solid crushed reductant, since the use of both can be effected commercially by persons competent in the reduction of ores to metals.

I believe it is perfectly clear to skilled metallurgists in the arr to which the invention relates that solid crushed and molten reductants can be interchanged but that the latter will require somewhat more careful control of operating conditions. I further believe that any skilled metallurgist on being presented with the disclosure of the use of solid crushed reductants in the process of the invention would appreciate that a molten reductant could also be used in the process.

The reason for the use of a solid crushed reductant is merely because it is easier to handle and control in this state than when it is molten and this gives obvious economic advantages.

The examiner maintains that the applicant is adding new subject matter to the disclosure when he states: "Alternatively, the reductant alloy of iron and silicon may be introduced into the ladle in a molten state. Preferably however use is made of a solid crushed reductant since this is generally the most economic.....". I am satisfied beyond reasonable doubt that to a person skilled in the art, to whom the disclosure is addressed, and in view of the affidavit of the inventor that this would not be considered as adding new subject matter.

A search of the prior art, U.S. Patent 3,074,793 to A.M. Kuhlmann, January 22, 1963, of record on the file of the Canadian Patent, of which this application is a reissue, discloses the following.

"The silicon-reducing agent may be elemental silicon or silicon alloys such as ferrosilicon. However, silicomanganese is particularly well suited for the process.

In carrying out the second step of the process, the silicon-reducing agent may be added to the melt in the ladle in the molten or solid state or may be part molten and part solid. The various reactants and additives may be introduced into the ladle simultaneously

or in sequence. The mixture of reactants may be poured from one ladle to another to promote complete reaction."

Therefore, I find that it is common knowledge that ferro-silicon reductant may be added in solid or molten form.

The examiner also argued that the application should be refused, "since there is no evidence that applicant intended to claim in the original patent what he claims in the reissue". However, I am of the opinion that once again the contents of the affidavit must be considered and I am satisfied that the actual invention made by the inventor was not restricted to the use of the reductant in the crushed form only, and no new invention is added by changing the disclosure to include the use of molten reductant.

While it is not incumbent on me, in this consideration, to make any finding on the patentability of the subject matter of the claims, the claims should be scrutinized very carefully for patentability in view of the matter set out in quotations from the prior art, U.S. Patent 3,074,793.

In the circumstance therefore I see no good reason to refuse the petition for reissue and I recommend that the rejection of the examiner, to refuse the reissue, be withdrawn based on the grounds set forth.

R.E. Thomas,
Chairman, Patent Appeal Board.

I concur with the finding of the Patent Appeal Board and I am therefore setting aside the Final Action and returning the application to the examiner for resumption of prosecution.

Decision accordingly,

A.M. Laidlaw,
Commissioner of Patents.

Dated at Ottawa, Ontario,
this 26th day of February, 1971.