

COMMISSIONER'S DECISION SUMMARY

C.D. 1222 .. App'n 616,666

Petition for reissue-reassertion of cancelled subject matter

This application is an application to reissue patent 1,256,144. The examiner rejected the petition on the basis that the applicant was attempting to reassert subject matter that was deliberately cancelled from the original application to avoid prior art and that because amendments to the original application were deliberate there cannot be inadvertence, accident or mistake. The Board determined that amendments made to the claims during the prosecution of the original application, even though made deliberately, caused an error through inadvertence, accident or mistake..

Application returned to the examiner.

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 616,666 having been rejected under Rule 47(2) of the Patent Rules [as they then read], the Applicant asked that the Final Action of the Examiner be reviewed. The rejection has consequently been considered by the Patent Appeal Board and by the Commissioner of Patents. The findings of the Board and the ruling of the Commissioner are as follows:

Agent for Applicant

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This decision deals with Applicant's request for review by the Commissioner of Patents of the Examiner's Final Action, dated December 9, 1994, on application number 616,666 (Class 285-63) filed on June 21, 1993 and entitled "Improved Tubular Connection". The inventor is Doyle E. Reeves and the application is assigned to Hydril Company. Application number 616,666 is an application to reissue patent number 1,256,144 which issued on June 20, 1989.

A hearing before the Patent Appeal Board was held on February 12, 1997 at which time the Applicant was represented by Mr. Hugh O'Gorman of Smart and Biggar and assisted by Mr. David Mallis, Manager of Tubular Products Engineering, Hydril Company.

The original patent and this application relate to a threaded pipe connection which is adapted to secure adjacent pipes in a continuous flow conduit forming relationship. Figure 4 shows a portion of a pipe with the thread construction on its external surface and a portion of a coupling with the thread construction on its internal surface. In use, the internal thread of the coupling engages with the external thread of the pipe to form a fluid tight connection.

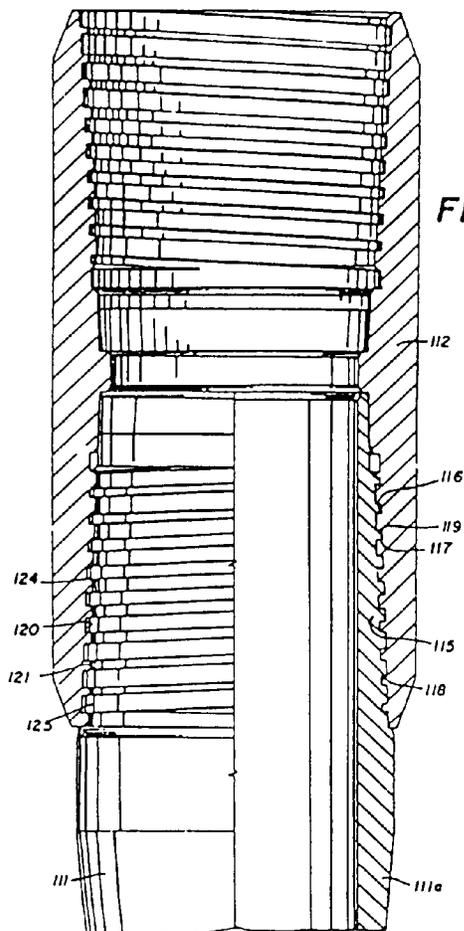


FIG. 4

The thread construction is composed of a dovetail-shaped helical thread which comprises a flat thread crest wall 125, two flank walls 117 and 119 and a flat root wall 121. The crest wall and the root wall are parallel to the longitudinal axis of the conduit. As the connection is being assembled (made up) the crest wall on the coupling comes into contact with the root wall of the pipe before completion of connection make up. This allows all thread lubricant to escape from the region between the crest and root walls before make up completion. Further rotation brings flank walls into full engagement.

In part 3 of the Petition for Reissue, the Applicant stated that the patent is deemed defective or inoperative as follows:

(3.1) That the Patent is deemed defective or inoperative by reason of the Patentee having claimed less than he has a right to in claim 1 of the Patent by calling for in lines 23-29 "... root walls and crest walls being dimensioned to move toward engagement ... forming metal-to-metal seals upon make-up ... after which continued forceable make-up of the thread connection moves the thread load flank walls of each member into metal-to-metal sealing engagement ..." thereby creating uncertainty and confusion in that the claim recites that certain action (sealing engagement of the roots and crests) occurs upon event "A" (make-up) and that after which further action (sealing engagement of the thread load flank walls) occurs upon the same event "A". The claim is not clear because if one action is to occur after another action, each action must be upon a different event (e.g. events A and B and not events A and A).

(3.2) That the Patent is deemed defective or inoperative by reason of the Patentee having claimed less than he had a right to in claim 1 wherein lines 11-14 define each thread including "... a first and a second thread flank wall ..." and which are generically referenced to in line 28 as "load" flank walls, thereby contributing to the defect noted above in paragraph 3.1 in that the stab flanks 117 are not distinguished from the load flanks 119 which creates an uncertainty as to the sequences in which the roots, crests, load flanks and stab flanks engage.

(3.3) That the Patent is deemed defective or inoperative by reason of the Patentee having claimed less than he has a right to in claim 1 of the Patent by calling for the above noted phrases in lines 23-29, thereby incorrectly inferring that the root and crests must first come into contact prior to the flanks coming into contact, whereas the present invention also relates to threaded connections wherein either of the (first 117 and second 119) load flanks may come into contact prior to or at the same time as the roots and crests come into contact.

(3.4) That the Patent is deemed defective or inoperative by reason of insufficient description or specification in that the flanks 117 and 119 are both described generically as "load" flanks and that the Patent does not distinguish between "load" flanks 119 and "stab" flanks 117 to provide a means to clearly claim the possible sequences in which the roots, crests, stab flanks and load flanks come into engagement.

In part (4) of the Petition, the Applicant identified a series of events during the prosecution of the original application number 451,853 which the Applicant states led to the alleged error and the possibility of confusion. In particular, the claims in the original application stated that the roots and crests engage "during" rotational make-up. This term was cancelled to make the claims clearer when the application was amended on May 25, 1988. It is the Applicant's position that this amendment introduced ambiguity into the claims. Furthermore, the Applicant stressed that the amendment was not made to avoid cited prior art.

In addition, the well known terms "stab" flank and "load" flank were not used. The flank walls were both referred to as load flank walls. Also, despite the fact that it is conventional knowledge that either the stab flank walls or the load flanks wall must be in contact during the entire make up procedure, the claims are mistakenly limited to the embodiment where both the load flank walls and the stab flank walls only come into contact as make up is completed.

In order to illustrate the changes proposed by the Applicant, the two main independent claims are reproduced below. Claim 1 of patent number 1,256,144 is as follows:

A threaded connection adapted for releasably securing a first member with a second member, including a first member having a tapered external generally dove-tail shaped helical thread formed thereon and forming a longitudinal axis for the threaded connection, and a second member having a tapered internal generally dovetail-shaped helical thread formed thereon, said internal helical thread interengaged with said external helical thread for securing said first member with said second member, said internal and external helical threads having a lubricant therebetween, each of said external thread and said internal thread having a flat thread crest wall disposed between and adjacent a first and a second thread flank wall and having a flat thread root wall disposed adjacent one of said flank walls, said root walls and said crest walls defining a thread clearance area therebetween with said lubricant disposed in said clearance area, and said root walls and said crest walls being parallel to the longitudinal axis of the connection, an axial distance at the crest wall between said first thread flank wall and said second thread flank wall defining a thread width, said axial thread width changing at a uniform rate substantially the entire helical length of the thread, the root walls and the crest walls being dimensioned to move toward engagement substantially eliminating said clearance area and forming metal-to-metal seals upon make-up of the thread connection, after which continued forceable make up of the thread connection moves the thread load flank walls of each member into metal-to-metal sealing engagement at substantially the same time upon completion of the rotational makeup of the thread connection, thus excluding any trapping of lubricant during make-up of the thread connection.

Claim 1 of the reissue application with the principal changes italicized and underlined reads as follows :

A threaded pipe connection adapted for releasably securing a pin member with a box member, including a pin member having a tapered external generally dove-tail shaped helical thread formed thereon and forming a longitudinal axis for the threaded connection, and a box member having a tapered internal generally dovetail-shaped helical thread formed thereon, said internal helical thread interengaged with said external helical thread for securing said pin member with said box member, said internal and external helical threads having a lubricant therebetween, each of said external thread and said internal thread having a flat thread crest disposed between and adjacent a stab and a load thread flank and having a flat thread root wall disposed adjacent one of said flanks, said roots and said crests defining a thread clearance area therebetween with said lubricant disposed in said clearance area, and said roots and said crests being parallel to the longitudinal axis of the connection, an axial distance at the crest between said stab thread flank and said load thread flank defining a thread width, said axial thread width changing at a uniform rate substantially the entire helical length of the thread, said threads increasing in width in one direction on the box member and in the other direction on the pin member, the roots and the crests being dimensioned to move into engagement during rotational make-up substantially eliminating said clearance area, the stab flanks and the load flanks fully engaging upon rotational make-up, thus excluding any trapping of lubricant between the roots and crests causing an indication that the connector is made-up before it is.

In his Final Action, the Examiner stated, in part, that:

.....the claims sought to be recaptured by reissue are directed to an inventive concept different from that patented, but related to the claims deliberately cancelled from the original application, in the interest of expediting the issue of the patent. Trying to obtain broadened reissue claims, with a scope equivalent to that of claims cancelled from the original application contradicts the earlier deliberate admission by the applicant, that the cancelled claims were not patentable.

.....

It is irrelevant if the changes were made to clear the cited prior art or for another reason.

It is also immaterial how the error in claiming occurred, if we take into consideration that the applicant supported the amended claims with a detailed justification. This is, without a doubt, a deliberate act which resulted in the sought patent.

In reply to the Final Action the Applicant stated, in part, that:

... Applicant submits that, contrary to the Examiner's assertion , the reissue claims are not directed to a different inventive concept from that patented (nor from that of the original claims). The reissue claims do not attempt to "recapture" an inventive concept related to the original application. Rather, they seek to correct for the May 25, 1988 amendment which sought to make the claims clear, but instead introduced ambiguity, in part, by the misuse of certain terms.....

...Applicant has at no time made an admission, either expressly or impliedly, that any of the claims were not patentable. In fact, Applicant previously indicated that the claims have always defined patentable subject matter.

.....

.....There is absolutely no basis for the Examiner's holding that reissue is likewise not permissible if the changes to the claims were made "for another reason".

.....

Applicant strongly submits that, contrary to what is implied in the fourth paragraph in page 3 of the Official Action, even a deliberate act may serve as a reason justifying a reissue. The May 25, 1998 amendment was of course a "deliberate act". However, it is necessary to look further, including to evaluate whether the "deliberate act" was to overcome an objection of the Examiner which as noted above would not be an acceptable reason for reissue. That Applicant amended the claims and included comments in support of the amendment does not foreclose the evaluation. Applicant will demonstrate below that the amendment was not for the purpose of overcoming prior art (or any other objection) but rather was intended to clarify the invention, although the amendment actually created ambiguity which is the reason why reissue is necessary.

To summarize, the Examiner has refused the petition for reissue because a) he feels that the Applicant is attempting to reassert subject matter which was deliberately cancelled to overcome prior art during the prosecution of the original application, b) it is irrelevant if the changes to the claims were made to avoid the prior art or for another reason and c) it is immaterial how the error in claiming occurred. The Applicant denies that there is an attempt to reassert previously cancelled subject matter, feels that the reason for cancellation of claims is a very important factor in determining if reissue is permitted and believes that it is important how the error occurred.

In reviewing the prosecution of the original application, the Board has studied the Examiner's report of November 27, 1987 which led to the amendment of May 25, 1988. In that report, the Examiner cited four United States patents but they were not used to reject the claims for obviousness or lack of novelty. They were merely used to show what the state of the art was in this field of technology and to demonstrate that the claims were indefinite.

In the May 25, 1988 amendment letter, the Applicant is clear in stating that the amendments to the claims are being made to clarify the wording. There is a discussion of the references but no indication that the cancelled claims were being cancelled in order to avoid the references. Accordingly, the Board does not find that the amendments were made for the purpose of avoiding the prior art.

As for the Examiner's statement that it is immaterial why the Applicant amended the claims and it is immaterial how the error arose, the Board does not believe that this is a correct interpretation of the law. If it were, there would be no reason to have the reissue provisions of the Patent Act.

In order to succeed at reissue, a patentee must satisfy three fundamental conditions. Firstly, it must demonstrate that the original patent is deemed defective or inoperative. Secondly, the patentee must show that the error arose from inadvertence, accident or mistake without any fraudulent or deceptive intent. Thirdly, the patentee must demonstrate that it had the intention to claim in the original application what it now seeks to claim in the reissue application.

There is no dispute that there is a defect in the claims of the original patent and that this defect arose through an error that was made during the prosecution of the original application. Further, this error was caused by a deliberate action of the Applicant, in the sense that it deliberately amended the claims. However, it was a deliberate act or attempt to clarify the language of the claims such that the Board is satisfied that the error or defect in the resulting patent was made through inadvertence accident or mistake. Even if an action is categorized as "deliberate", it does not necessarily follow that such an action cannot have caused an error through inadvertence, accident or mistake. There is no question that any fraudulent or deceptive intent was involved.

In order to show that the patentee is claiming in the reissue application what it always intended to claim in the original, Mr. Mallis brought a model of the connection to the hearing. The model had a cut away portion so that it was possible to see the threads of the pin and the box members while the joint was being made up. Mr. Mallis' demonstration of the interaction of the various thread surfaces as the joint was being made up confirmed that, depending on the orientation of the joint, either the stab flanks or the load flanks were in contact during make up. Since this is the way that make up must take place, the Board is satisfied that the patentee always intended to claim the invention in this manner.

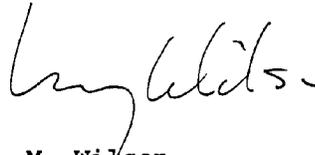
This position is reinforced when the Board examines the differences between claim 1 as found in the issued patent compared with claim 1 as presented in this reissue application. The differences have

been highlighted, the Board has carefully considered them and finds that the invention defined by these claims is essentially the same, it cannot be said that they are directed towards different inventions.

In summary, the Board believes that the Applicant in its petition has satisfied the requirements of Section 47 of the Patent Act with respect to reissue and, as a result, recommends that application number 616,666 for reissue of patent number 1,256,144 be returned to the Examiner for further prosecution consistent with this recommendation.



P.J. Davies
Chairman
Patent Appeal Board



M. Wilson
Member
Patent Appeal Board

I concur with the findings and the recommendation of the Patent Appeal Board. Accordingly, I remand the application to the Examiner for further prosecution consistent with this recommendation.



S. Batchelor
Commissioner of Patents

dated at Hull, Quebec
this 10 day of October 1997