COMMISSIONER'S DECISION

REISSUE: ELEVATOR CABLE LUBRICATION

Applicant had claimed two aspects of the same invention in two applications, the first of which had issued to patent. The second had been refused for double patenting. Applicant then attempted to reissue the patent to add the aspect in the second application. It was concluded that under these circumstances the Applicant had intended to claim the second aspect, and the reissue application should be allowed to proceed. Further the name of the second inventor could be added to the reissue application. However the application should be remanded to the Examiner to assess whether the claims were too broad. Rejection reversed and modified.

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Patent application 315588 (Class 187-10), was filed on October 31, 1978 for an invention entitled "Elevator System." The inventor is Harry Berkovitz, assignor to Westinghouse Electric Corporation. The Examiner in charge of the application took a Final Action on August 1, 1979 refusing to allow it to proceed to patent. In reviewing the rejection, the Patent Appeal Board held a Hearing on August 6, 1980 at which the Applicant was represented by Mr. E. H. Oldham.

The subject matter of this application relates to an elevator of the type used in high-rise buildings. A synthetic lubricant is used on the cables to provide a high coefficient of friction between the driving sheave and the cable. The cable is lubricated when fabricated, and lubrication may be maintained during operation by means of a wick arrangement.

Originally Applicant had two applications before the Patent Office. In one (174,632, now patent 977,699) he claimed an elevator system where the cable is lubricated during use with a special synthetic lubricant which not only lubricates the strands within the cable to reduce wear, but which unexpectedly increases friction between the cable and the driving sheave so the cable will not slip. Specifically he uses a known lubricant, Santotrac, for that purpose. Only one inventor, Mr. Berkovitz, is said to be the inventor of that invention.

In the other application (174,677), Applicant claimed an elevator system where the rope is prelubricated during manufacture (with the same lubricant). In this case there are said to be two inventors, Mr. Berkovitz and

a Mr. Harding. Their application was rejected on the grounds that it was directed to the same invention as the issued patent, and that there was no additional invention warranting the grant of another patent. The rejection went before the Commissioner and was affirmed, it being found that the point of the invention in both cases was the same, namely the use of a lubricant which not only lubricates the cable but also increases the friction between cable and shaft. The Examiner also rejected the application because the lubricant Santotrac and its properties were previously known and patented. The Commissioner's refusal under Section 42 of the Patent Act was not appealed to the Federal Court and the application is now defunctus.

Subsequently the Applicant attempted to reissue the patent that was granted to add to it the claims which had been presented in the rejected application, i.e. to prelubricated cables. At the same time he wished to add Mr. Harding's name as co-inventor with Mr. Berkovitz.

In the Final Action the Examiner refused the application for reissue because "of an obvious lack of intent to protect in the original patent what is claimed in the reissue." All the claims were also rejected as unpatentable over the following patent:

United States	3,440,894	April 29, 1969	Hammann et al

This is the prior patent for the synthetic lubricant known as Santotrac.

In the Final Action the Examiner's position was stated in the following terms:

> ...
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> This lack of intent is emphasized by the fact that applicant submitted to the Office two separate applications as follows:
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		(a)	(b)
Application Number	-	174,632	174,677
Filing Date	-	June 21, 1973	June 21, 1973
Inventor	-	Berkovitz	Berkovitz & Harding
>
> Application (a) issued to patent while invention (b) was given a Final Rejection for not being patentably different from (a).

> Applicant wishes to add the rejected claims of (b) and (a) on the grounds that while the applications were co-pending he should have been informed that the claims overlapped. This is not grounds for reissue. Item (4) of the petition for reissue is self-defeating since it clearly states lack of intent to claim in the issued patent.
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> Applicant argues that "he fully intended to claim patent protection". It is emphasized to applicant that he must show intent to claim in the issued patent in order to succeed with a reissue petition. It is impossible for applicant to show such intent since he filed two separate applications (one with one inventor and the other with two inventors).
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> It is noted that applicant has not responded to the previous Office Action regarding this difference in inventors. Applicant has taken the claims of inventors Berkovitz and Harding and now wishes to add these claims to a patent with a single inventor Berkovitz. What has happened to Harding's contribution to the invention?
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> ...
>
> It is maintained that applicant has disclosed no subject matter that is patentable over United States Patent 3,440,894, published April 29, 1969. This patent teaches the advantage of using SANTOTRAC in a tractive drive. Applicant suggests that his elevator is more comparable to a friction drive, yet throughout his disclosure (see page 1, page 5, page 6, etc.) he constantly uses the word "traction" and "traction drive" to describe his apparatus. SANTOTRAC is used in the same manner and for the same purpose in the apparatus of the prior art and the apparatus of this reissue application. All claims are rejected as being unpatentable over the prior art.

In response to the Final Action the Applicant referred to an earlier response in which he had stated (inter alia):

> ...
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> It is quite clear that the applicant believed he had made a patentable invention and he fully intended to claim patent protection. His mistake was that he presumed that it was an inventively different patentable invention and hence, would require two applications, as has been previously stated. However, this has now been decided to the contrary by the Appeal Board which indicated that the applicant made a mistake in presuming that there were two inventions. He did not fail to claim protection because he did not believe what he had done constituted an invention, on the contrary he filed a separate application.
>
> Proceeding with the holding in Northern Electric versus Photo Sound, the Court considered whether that patent could have been deemed defective or inoperative. It is quite clear in this case that the patent is inoperative because its claims do not cover material which

> the applicant intended to cover. The intent of the applicant can be clearly established by the existence of the other application namely application 174,677 which shows conclusively the intention of the applicant to claim protection in respect of matters now sought to be claimed in the reissue application.
>
> It therefore appears that the present reissue application completely conforms to a requirement of Section 50, Sub. 1 and the court decisions in that the patent is deemed by the applicant to be inoperative by reason of insufficiency of specification and claiming less than he had the right to claim as new and this arose from mistake in that the applicant was mistaken in his view that the claims in the two applications required separate applications.
>
> ...

At the Hearing Mr. Oldham emphasised that the Applicant believed he made two inventions for which he filed two applications, and that this mistake is now being rectified by reissue. He argued that the Patent Office, in rejecting the copending application for claims "being directed to the same invention as that for which this patent originally issued," substantiates the Applicant's position that he intended to claim the subject matter at the filing date of the issued patent. From this it is clear that the Applicant sought protection for the currently rejected claims at the time of filing of the patent application. Whether they were filed in the application which issued to patent or in the application which was subsequently rejected because of that patent does not detract from the Applicant's intent to seek protection for that aspect of his invention. Therefore we recommend that the rejection based on lack of intent be withdrawn since the Applicant was not informed of the claim overlap to one invention while the applications were copending.

Another question raised in the Final Action pertains to the difference in inventors. Berkowitz is the inventor in the original patent and the subject matter now includes the claims of the Berkovitz and Harding application. Section 33 of the Patent Act provides for joining inventors. Section 33 deals with an 'application' and 'applicants'. Farbwerke Hoechst A.G. v Commissioner of Patents 50 C.P.R. 220 @251-2 states that an application for a reissue is included in the word "application" and that Sections 42 and 44 of the Patent Act apply to it. Therefore we find no objection to the Applicant adding the name of Harding as an inventor in this application. We would point out that reissue to correct

misjoinder of inventors is not permissible. However if a reissue application is properly filed for other reasons it must be treated as an ordinary application and the names of missing inventors can be added under Section 33(4) of the Act.

The Final Action applied the Hamman (SANTOTRAC) patent in rejecting the claims. It maintains that the advantages of using Santotrac in a tractive drive are taught by the patent and that the Applicant describes his apparatus in terms of "traction" and "traction drive."

Mr. Oldham argues that the Applicant relies on the "frictional" properties of Santotrac rather than the "tractional" properties as outlined in the patent. To support his position he refers to Product Engineering dated Aug. 1971 in which the operation of Santotrac is explained. This article describes it as a "lubricant at normal pressures and shear rates but turns instantly to a glassy pseudo solid when squeezed from 20,000 to 400,000 p.s.i. in rolling contact."

There seems to be considerable overlap in the meaning of "friction" and "traction" as used in this art. U.S. Patent 2,440,894 (SANTOTRAC) states in column 1 line 28 that "Traction is broadly defined as the adhesive friction of a body on a surface in which it moves" and at line 35 ff it reads: "A tractive drive, in simplified form, could comprise two parallel cylindrical rollers in tangential contact, one roller being the input member and the other the output member. The torque capacity of such a tractive drive is a direct function of the contact pressure between the rollers and the coefficient of traction of the roller surfaces. The phrase 'coefficient of traction' is preferred instead of 'coefficient of friction' in order to connote rolling contact." (underlining added) From the textbook "Elevators" by Fred H. Annett published by McGraw-Hill Book Company - third Edition 1960, "traction" is clearly established in the elevator field. In the application reference to "traction" is found throughout the disclosure.

Page 8 of the application at line 13 ff states that "....suitable synthetic lubricants are available commercially in different viscosities from Monsanto Chemical Company which lubricants are sold under the trade mark SANTOTRAC.

SANTOTRAC synthetic lubricants have been sold for the purpose of increasing the coefficient of traction between two rolling members in rolling contact type drives..." and at line 21 ff. it states that "....These applications, however, are fundamentally different than the application of lubrication wire hoist rope and the drive sheave of an elevator system, and do not suggest the unexpected advantages obtained by the new and improved combination disclosed in this application...." We note, however, that at page 7 line 30 ff. the disclosure states "....While the invention is not limited to any specific synthetic lubricant, it has been found that a synthetic hydrocarbon lubricant which includes isopropylcyclohexane will provide the specified range of coefficient of friction...." (underlining added)

According to the experts the pressure between the hoist cables and drive sheave of an elevator is in the order 200 psi. Pressures described in the Product Engineering article on Santotrac are in the range of 20,000 to 400,000 psi. As we found on page 7 of the Applicant's disclosure the use of a synthetic hydrocarbon lubricant which includes isopropylcyclohexane provides the coefficient of friction required for elevator drives. Since isopropylcyclohexane is necessar for improving elevator traction then it should be present in all claims. As currently structured claims 1 to 14 specify only that a "synthetic lubricant" is present, and it is not till we come to claims 15 to 18 that isopropylcyclohexane is mentioned. Since a synthetic hydrocarbon which includes isopropylcyclohexane is the only lubricant disclosed which will work, then it must be present in any claim considered acceptable. However, since this question was not at issue in the Final Action we recommend that the application be returned to the Examiner to consider this objection.

To conclude we recommend that the rejection for lack of intent to claim be withdrawn. Further the rejection of claims 15 to 18 should also be withdrawn. In addition, we recommend that the application be returned to the Examiner to reconsider claims 1 to 14.

G.A. Asher
Chairman
Patent Appeal Board, Canada

S.D. Kot
Member

I have carefully reviewed the prosecution of the application and considered the recommendation of the Patent Appeal Board. Accordingly I withdraw the rejection of the application, and of claims 15 to 18. The application is to be returned to the Examiner to consider whether the other claims are too broad.

J.H.A. Gariepy
Commissioner of Patents

Dated at Hull, Quebec

this 6th. day of November, 1980

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