

COMMISSIONER'S DECISION

Obviousness; Reissue: Spreader Shower for Papermaking

The spreader shower simultaneously flattens or spreads and cleans the fabric endless belts in the Fourdrinier section of a paper making machine. After the rejection the applicant submitted restricted claims which were found to be allowable.

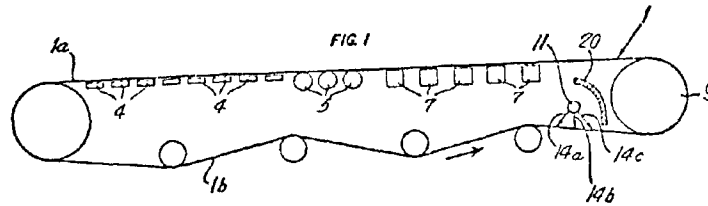
Final Action: Affirmed - amended claims accepted

This decision deals with a request for review by the Commissioner of Patents of the Examiner's Final Action dated July 28, 1976, on application 225,214 (Class 92-25). The application was filed on April 21, 1975, in the name of Robert A. Truesdale et al, and is entitled "Spreader Shower." This is a reissue application of patent 952,750. That patent, according to the applicant, is defective for the reason that the Patentee claimed less than he had a right to claim as new.

On August 17, 1977 the examiner and members of the Patent Appeal Board visited the C.I.P. paper mill at Gatineau, Quebec to view the spreader shower of the instant application installed in the papermaking apparatus. We might add at this time that it was a most interesting demonstration of how the device would perform in operation.

Following the visit to the paper mill a meeting was held at the Patent Office with Mr. M. Sher, the Patent Agent, Mr. J.G. Buchanan, co-inventor and Manager of the applicant's Company, and Mr. J. Hodson, a representative of the Company. At that meeting it was made clear by the Board that: 1) any allowable claim must be narrower in scope than the claims cancelled in the parent application, and 2) any allowable claim must distinguish from the teaching of the cited art. These points will be discussed later.

The application relates to a spreader shower (11) for simultaneous spreading and cleansing the fabric endless belts in the Fourdrinier section of a paper making machine. Figure 1, shown below, is illustrative of that arrangement:



In the Final Action the examiner ably presented his position in a detailed action where he determined that the applicant was not entitled to obtain reissue for his patent on the present claims, because the claims were of the same scope as some of the originally cancelled claims, and furthermore the claims do not patentably distinguish from the cited art. Another ground was failure to establish that there was an error by which the patent was rendered defective.

We find that there is no need to give the position of the examiner in the Final Action in any more detail, or to comment on the response by the applicant, because at the meeting of August 17, 1977, the applicant stated, after a discussion of the problems, that he was willing to further amend the claims and indicated what amendments he might be willing to make.

On September 29, 1977, the applicant submitted his amendment to the Board.

In that amendment he stated (in part) as follows:

...

Applicant's agent would take this opportunity to thank Messrs. Hughes, Kot and Barber for taking the time to visit, with the representatives of the applicant, the CIP paper mill at Gatineau, Quebec to view, first hand, the spreader shower of the instant application installed in the papermaking apparatus, and for the courtesy extended in granting a meeting following the visit to the mill. As per the discussion during this meeting, applicant is submitting herewith a new set of claims in an

effort to advance the prosecution of this application to allowance. In the new claims, paragraph 6 of claim 1 and paragraph 11 of claim 5 have been amended to read as follows:

"whereby each of said nozzles forms an angle of between 10° and 60° with the longitudinal axis of said pipe means, all of said angles formed between said nozzles and said longitudinal axis being substantially equal".

As discussed at the meeting, there were basically two issues to be attacked:

1) It was necessary to amend the claims to include further limitations which would further distinguish the claims from the claims as originally filed in the original application.

2) It was necessary to add further limitations to further distinguish the claims in the application from the teachings in the Ingham et al and the Di Corpo patents of record.

It is submitted that both of these issues are met with amended claims 1 and 5. As pointed out during the meeting, the claims did not, either during the prosecution of the original application or the present reissue application, contain the limitation that all of the angles formed by the nozzles are substantially equal. Thus, the claims distinguish from the claims as originally filed in the original application, as well as claims which appeared in the applications during the prosecution of both the original application and the present reissue application.

...

Considering the patentability of the new claims versus the teachings in the references of record, figure 2 of Di Corpo and figure 7 of Ingham et al illustrate that it is contemplated, in accordance with the teachings in the patents, that the angles formed between the nozzles and the longitudinal axis of the respective pipes, vary along the length of the pipes. Specifically, the angles decrease from the center to the outward edges of the respective pipes. Further, there are comments in both of these patents which indicate that such an arrangement of different angles are necessary for the operation of the Ingham et al and Di Corpo devices, so that there is no incentive for them to make all of the angles equal.

Referring first to the Ingham et al patent, at column 1, line 15, the patent recites "This fan-like spray pattern is obtained either by the use of a straight spray tube with nozzles set into it at different angles, or by a spray tube bent into the shape of an arch....". As the spray tube of Ingham et al must have a fan-like spray pattern, it would go contrary to the teachings of Ingham et al to have all of the angles equal to each other.

In a like manner, the device of Di Corpo must also have a fan-type spray. This is discussed at column 3, lines 6 et seq. of Di Corpo which recites:

"... of a fan-type spray. This is due to the different angles of the bores through the manifold block with respect to the center line of the tube as well as the different angles of the bores in the valve member with respect to the corresponding bores through the manifold."

Although Di Corpo does mention different specific angles at line 16 et seq. of column 3, it is believed that this refers to a different set of differently angled nozzles. It does not refer to an arrangement wherein all of the nozzles are at the same angle.

In view of these comments in the cited references, it is submitted that there would not be any incentive to make all of the nozzle angles in Di Corpo and Ingham et al of the same size, but rather, would go against the teachings in the cited references. Accordingly, it would not be obvious to modify the devices in the cited references in accordance with the limitations in new claims 1 and 5 so that claims 1 and 5 distinguish patentably from the teachings of the cited references.

As will also be recalled, the question of lack of error was also discussed at the meeting. Mr. Buchanan once again outlined the steps which led to the incorrect and erroneous claiming of the invention as per the issued patent. In this regard, Mr. Buchanan spoke both as a co-inventor of the present invention as well as a Manager of the applicant company concerned with the obtaining of patents. The facts, as presented by Mr. Buchanan at the meeting, were, of course, in conformance with the facts as presented in the various communications from the applicant to the Canadian Patent Office. However, at the meeting, the state of the facts was, of course, available for questioning. Further, because the facts were orally presented, it is believed that it was possible for the Examiner and the members of the Board of Appeal to appreciate that the change of focus in the claims arose as a result of error which was inadvertent. It is therefore once again submitted that the situation as described by applicant at various times comes within the scope of Section 50(1) of the Patent Act so that the reissue application should be allowed.

...

After carefully studying the prosecution of this application including all of the arguments raised by the applicant and the examiner, we have no hesitation in agreeing with the examiner that the claims at the time of the Final Action were properly refused.

In considering the amendment of Sept. 29, 1977 we find that the applicant has restricted independent claims 1 and 5 by adding the phrase "all of said angles formed between said nozzles and said longitudinal axis being substantially equal." Claims 1 and 5 are no longer of the same or of broader scope than

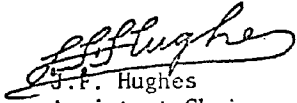
those cancelled during prosecution of the original application. That rejection has been overcome.

Claim 1 with the amendment now reads as follows:

A spreader shower for use in a paper making machine of the type having at least one endless fabric belt driven by a driving roll, the endless fabric belt having a high tension portion and a low tension portion, the high tension portion being disposed in that portion of the belt preceding the driving roll in the direction of travel of the belt, and the low tension portion being disposed in that portion of the belt following the driving roll in the direction of travel of the belt; said spreader shower comprising: a series of spreading nozzles joined by an elongated pipe means for providing fluid under pressure to said nozzles, said nozzles having outlet ends; the outlet ends of substantially all of said nozzles, located in that portion of the shower extending substantially from the center of the pipe means to the left hand end thereof, being slanted toward the left hand end of said pipe; the outlet ends of substantially all of said nozzles, located in that portion of the pipe extending substantially from the center of the pipe to the right hand end thereof, being slanted toward the right hand end of said pipe; whereby each of said nozzles forms an angle of between 10° and 60° with the longitudinal axis of said pipe means, all of said angles formed between said nozzles and said longitudinal axis being substantially equal; said pipe means being adapted, in operation, to be disposed across the width of said endless fabric belt and in substantially parallel alignment with and in close proximity to a surface of said endless fabric belt; the pipe means being so arranged that the outlet ends of said nozzles are directed to said surface of said endless fabric belt in said low tension portion thereof; whereby, in operation, fluid emerging under pressure from the outlet ends of said nozzles will impinge on said surface of said endless fabric belt and will be directed substantially toward the lateral edges of said endless fabric belt, whereby to spread the endless fabric belt in its lateral direction.

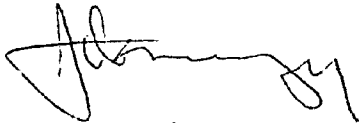
That claim now also overcomes the rejection of former claims 1 to 4 based on prior art. The references do not show nozzles oriented at equal angles. Clearly the claim is now directed to a novel combination and we are satisfied that there is ingenuity in the inventive concept. The amendments to claims 1 and 5 have also circumvented the ground of "failure to establish that there was an error by which the patent was rendered defective."

We are satisfied and the examiner agrees that the amendment has fully overcome the rejections in the Final Action. We recommend that the amendment be entered. This will place the application in condition for allowance.



J.F. Hughes
Assistant Chairman
Patent Appeal Board, Canada

I have reviewed the prosecution of this application and I concur with the recommendations of the Patent Appeal Board. Accordingly, I accept the amendment of September 29, 1977. The application is returned to the examiner for resumption of prosecution.



J.H.A. Gariépy
Commissioner of Patents

Agent for Applicant

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Montreal, Quebec
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Dated at Hull, Quebec

this 18th day of November, 1977