COMMISSIONER'S DECISION

OBVIOUS: New Combination; Several Citations.

FINAL ACTION PROCEDURE: Second-action Same Grounds.

The broad concept of combining the slack control devices of either of two citations with the travelling skyline system of a third citation is but expected skill. Other claims including a feature not shown in any citation allowed. The applicant was given the option of having the rejection of one claim, made for the first-time in the Final Action, referred back to the examiner for further consideration.

FINAL ACTION: Affirmed in-part.

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This decision deals with a request for review by the Commissioner of Patents of the Examiner's Final Action dated August 25, 1972 on application 092,031. This application was filed on August 31, 1970 in the names of David G. Rennie and Maurice J. McIntyre and refers to a "Scab Line Carriage System Method And Apparatus." The Patent Appeal Board conducted a Hearing on November 7, 1973, at which Mr. J. Ellis represented the applicant.

In the prosecution terminated by the Final Action the examiner refused claims 1 to 6, 8, 12, 15 and 16, in that they define a system which is obvious in view of the following prior art:

Canadian Patent:

419,507 Grabinski

United States Patents:

1,782,528 Berger
1,789,472 Meany
2,141,469 Hansen

The examiner also refused, for the first time, claims 7, 9 to 11, 13 and 14 in view of the cited prior art, design preferences and expected skill.

This application is a division of application 011,355. The claims of that application, as allowed, are directed to a log yarding carriage. The claimsof the present application are directed to a log yarding

system which includes the log yarding carriage of the parent. More specifically the log yarding system of the present application comprises a yarder mechanism including sky line winch means and main line winch means, a tail block spaced from said yarder mechanism, and a traveling sky line connected to said sky line winch means.

In the Final Action the examiner stated in part:

> The patent to Grabinski shows in substance a two-part main line and a load line in combination with a running sky line. The addition of a slack control to the above system is considered obvious, and such controls are shown in the applied United States patents.
>
> ...
>
> It is held that although the lines used in the devices of the prior art have different names, (the corresponding one to applicant's one of the two-part main line is called a slack pulling line), their function in positively paying out the load line and preventing sag, is the same.
>
> In lines 26 to 29 on page 9 of his patent Grabinski states that the arrangement as shown in Figure 4 can be altered by attaching the tong line (47) to the skidding line (35) (as opposed to the arrangement shown in Figure 4, where the skidding line (35) and the tong line (47) are actually one continuous line). In such arrangement the skidding line would be continuous with the "slack pulling line" (38), will run around the pulley (42) and back to the winch (52), the same way as shown in applicant's figures 1 and 2. (The term "skidding line" used by Grabinski corresponds to applicant's "main line"). It is also pointed out that in the expression in lines 2 through 4 on page 2 of this application applicant has acknowledged the existence of "yarding system employing carriages with two-part main cables (which) generate slack in the lower main line when the carriage is moving out into the road" (underline added).
>
> From this statement it is obvious that novelty of applicant's device may not lie in the provision of "two-part main cable". It would appear that such novelty lies in a combination of two-part main line and control of slack in the "lower main line" (32). Such control of the slack, however, is well known in the art, and as pointed out above, is shown in different forms in patents to Berger, Meany et al and Hansen et al.
>
> In the discussion of the affidavit of Mr. J. J. Guddall, in the letter of April 22, 1971, applicant states:

> "(a) that standing skyline arrangements with two-part main or inhaul lines as exemplified in Weber and Meany et al are old and have been in use for at least some 45 years;" (underline added).

This statement further supports the position that there is no novelty in the use of two-part main line.

The details of operation of applicant's "main line drum or winch means" have not been fully and clearly disclosed, probably under assumption that these features are well known in the art and their functioning is therefore obvious. It is held that operation of two-part main line with connection to the load line would require two winch drums, able to rotate either in the same or in opposite directions. Figure 1 of the drawings is showing only one drum (18).

It is held that inclusion of means interconnecting the main line and load line sheaves, well known in the art and shown in the applied United States patents, in the yarding system of Grabinski is obvious to those skilled in the art and claim 1 is therefore refused.

...

On further review of this application it has been found that claims 7, 9 through 11, 13 and 14 are also not patentable. It is regretted that these claims were not included in previous rejections, however, to expedite prosecution of this application they are now also rejected.

The applicant, in his response dated January 15, 1973 to the Final Action, stated in part:

> The present invention relates to a novel system for yarding logs; particularly logs lying remote from the sky line path.
>
> Referring to FIGURE 1 and 2 of the applicant's drawings, applicants' log yarding system comprises a carriage 42 slidably mounted on a running sky line 28 which is fed out from a fairlead assembly 16 atop a yarding tower 12. The running sky line 28 further extends around a tail block 26 and back to the carriage 40 for connection at point 72. A two part main line is provided, the first part of which (inhaul line 30) loops around a sheave 62 and extends back to the yarder 10 through sheaves 20 and 22, to be rotated about a pair of yarder drums. The second part of the two part main line (load line 32) also extends over a sheave 66 on the carriage 42 and is provided with a choker at its outer extremity, while the other end is connected to the lower part of the inhaul line 30 at connection 34.
>
> Briefly summarizing the operation of the system, the carriage 40 is transported out to a log by paying in on the sky line 28 while simultaneously paying out on both parts of the two part line. This operation is continued until the carriage 40 reaches the proximity of a log. If the log lies beneath

the path of the running sky line 28, the choker of the line 32 is set on the log and the line operation is then reversed, i.e., the two part main line 30, 32 is simultaneously payed in and the sky line 28 is payed out. This operation, of course, continues until the carriage and the log are brought to a landing adjacent the yarder 10.

...

Systems using standing sky lines were used for many years in the logging industry. However, a running sky line system was developed by Grabinski in the early 1940's which reduced the number of cables required and greatly simplified the operation of these lines. In the Grabinski system shown in Canadian patent 419,507, a sky line 12 extends, over a sheave 15 mounted on the spar tree 16, to and around a sheave 20 mounted on spar tree 17 and back to a carriage 18. The reason the sky line 12 is called a running sky line is that, since it also functions as an outhaul line, it is movable. The inhaul line 35 functions in a manner similar to Berger and Meany. Moreover, a slack pulling line 38 is provided for pulling the slack in the inhaul line 35 in a manner similar to Berger and Meany.

However, there are some fundamental differences between the two systems. In the standing sky line system the outhaul line can be small because it only pulls the carriage outwardly when there is no load on the carriage and also because it is not made to support the carriage in suspension. In the Grabinski running sky line system, however, since the sky line also functions as the outhaul line, the inhaul and outhaul lines must be held under tension at all times to keep the carriage in suspension.

...

Applicants have solved this problem by providing a two part inhaul line having a load line connected thereto for supporting the logs. The two part inhaul line functions in an improved manner to (1) positively support the carriage to maintain the carriage in suspension, and (2) to operate the load line to bring the log toward the carriage while keeping the carriage in line.

...

Therefore, in applicant's respectful submission, and despite what is said in the first page of the Final Action, the basic issue is still whether the combining of the teaching of Grabinski's running sky line with the disclosures of the secondary references, which are each <u>said</u> to show a two-part main line (applicant does <u>not</u> admit that they show this and has argued above that they don't) combined with a standing sky line, is simply expected skill in the art, i.e. is obvious. The Examiner has suggested that this constitutes expected skill whilst applicant feels that the combination was most definitely not an obvious one based on expected skill.

In the first place, there is nothing in any of the secondary references to suggest that one of them could usefully be combined with the primary one and then further modified to arrive at the construction claimed by the present application. The very age

of the patents to Grabinski, Hansen, Berger and Meany strongly suggests that the applicant's invention was by no means obvious. The invention is extremely useful commercially, and, had it been obvious once the Grabinski patent had been published in 1944, the art would surely not have had to wait over two decades for the present inventors to develop their apparatus if all that was required was expected skill to arrive at applicant's device by somehow combining Grabinski with the teachings of Hansen or Berger or Meany, each of which issued well before Grabinski.

In this connection, it is important to note that systems such as those disclosed in Berger, Grabinski and Meany are not simply disclosures in "paper patents." Those systems, including the Grabinski one, have long been used in the logging industry. The inventors in the present case have, as a matter of fact, both grown up in the logging industry and were well versed in such systems. Had the present invention been obvious to anyone having knowledge of the Grabinski system together with knowledge of a system such as the Berger one, neither the present inventors nor their confreres in the logging industry would have been content to wait until the 1960's to enjoy the benefits of the applicant's invention which is currently experiencing appreciable commercial success.

...

If by any chance the Board does not favourably reconsider the Examiner's objection to claim 1 and approve that claim for allowance, it is sincerely hoped that the Board will at least favourably deal with claims 7, 9, 10, 11, 13 and 14 which were first objected to in this Final Action. Such a rejection would appear to be contrary to the intent of Rule 46(1), and seems most inappropriate on that ground alone. Furthermore there are solid substantive grounds, in addition to this formal ground, for allowing these claims.

The first question to be decided is whether claims 1 to 6, 8, 12, 15 and 16 define a system which is obvious in view of the cited prior art. Claim 1 reads:

In a log yarding system of a type comprising a yarder mechanism including sky line winch means and main line winch means, a tail block spaced from said yarder mechanism, and a travelling sky line connected to said sky line winch means and extending therefrom outwardly to said tail block, then over and around said tail block, and then back towards said yarder mechanism, yarding equipment comprising: a carriage including means supporting it on and for movement along said sky line, between said yarder mechanism and said tail block, the free end of said sky line being connected to said carriage, a main line sheave supported on said carriage below said supporting means; a two-part main line extending from said main line winch means to said main line sheave, then around said main line sheave, then back to said main line winch means, with the inner ends of said two-part main line being connected to said main line winch means; a load line sheave supported on said carriage; a load line connected to one part of said main line at a location spaced towards the yarder mechanism from the main line sheave, and extending from said location to said load line sheave, then over said load line sheave, and then vertically downwardly for connection to a turn of logs, said load line comprising the

> other part of the two-part main line, and means interconnecting said main line and load line sheaves, so that rotational movement of the main line sheave during main line movement in the direction involving movement of the connection point of the load line to the main line towards the carriage is transmitted to the load line sheave, causing said load line sheave to positively play out said load line.

The reference to Grabinski discloses a two-part main line and a load line in combination with a running sky line. Claim 4 of this patent reads:

> In apparatus of the class described, an overhead cable; a first carriage means carrying a plurality of sheaves and operatively supported by said cable for travelling movement thereon; a second carriage means operatively supported by said cable for relative travelling movement thereon toward and away from said first carriage; a skidding line fixedly connected with said second carriage; a tong line passing through a sheave in said first carriage and fixedly connected with said second carriage; and a slack pulling line fixedly connected with said second carriage and passing through sheave means of said first carriage.

The Patents to Berger and Hansen show different solutions to the problem of preventing slack in a load line. These patents and the patent to Meany also show variations of standing sky line structures.

The material question is whether it is obvious to use a slack control system on a running sky line with the two part main line system of Grabinski.

First it is noted that different terminology is used in the present application from that used in the cited references. For example, the "slack pulling line" in Grabinski corresponds to part of the "two part main line" in the present application. Both lines function in the same manner, that is to pay out the load line to prevent sag. Furthermore, these lines (as is stressed by the applicant) may be of a different size. These features, however, do not describe patentable alterations in structure, and cannot be relied upon for patentability.

The applicant also advanced the argument that his system is particularly adapted to operate when the logs do not lie directly under the sky line. We find, however, that the disclosure of the application does not support this argument. It is well known that in order to operate a logging system having "a travelling sky line," and "a two-part main line" as well as "a load line," there must be

a suitable number of winches. For the "two-part main line" there must be two winches capable of rotation: 1) both in the same direction for moving a carriage, riding on the sky line, to the cutting site; 2) capable of rotation in opposite directions to feed the load line through the carriage, down to the log; 3) capable of rotation in a direction opposite to that taken in 2) for lifting the load; and 4) capable of rotation in a direction opposite to that taken in 1) to bring the carriage and the load to the storing site.

For the above considerations the applicant has shown one winch (18) in Figure 1, and describes it as "a main line drum or winch means 18." There is nothing in the disclosure that would support applicant's description of operation of the system when the logs do not lie directly under the sky line. The Board is therefore satisfied that the system operates in substantially the same manner as the systems of the prior art cited.

From a study of claim 1 it is our view that all the elements, with the exception of "means interconnecting said main line and load line sheaves" are disclosed in the Grabinski reference. Those "means", however, are shown in different forms in the remaining patent citations.

The Grabinski patent on page 9 line 6 states that the arrangement shown in Figure 4 can be altered by attaching the tong line (47) to the skidding line (35) (as opposed to the arrangement shown in Figure 4, where the skidding line (35) and the tong line (47) are actually one continuous line). In such arrangement the "skidding line" would be continuous with the "slack pulling line" (38), and will run around the pulley (42) and back to the winch (52) in the same manner as shown in figures 1 and 2 of the present application. (The term "skidding line" used by Grabinski corresponds to applicant's "main line").

The cited patents to Berger and to Hansen disclose different solutions to the problem to preventing slack in a load line. Such solutions are covered by the "means" of claim 1. The patent to Hansen, for example, shows means interconnecting said main line and load line sheaves so that rotational movement of the main line sheave is transmitted to the load line sheave causing said load line sheave to positively pay out said load line. It is also noted that this problem of preventing slack in a load line exists independently of the type of the yarding system used.

It may also be pointed out that at lines 2-4 on page 2 of this application, the applicant has acknowledged the existance of "...yarding system employing carriages with two-part main cables generate slack in the lower main line when the carriage is moving out into the road." From this admission it is obvious that any novelty in the applicant's device could not be in the provision of a "two part main cable".

In our view, therefore, it is but expected skill to combine in the broad concept the slack control devices of Berger or Hansen with the travelling skyline system of Grabinski.

Claim 2 adds an additional feature that the main line sheave, the load line sheave, and the means for supporting the carriage are all substantially co-planar. Such features, however, are shown in the Grabinski patent (fig 4). Claims 3 and 6 describe additional features which are disclosed in the reference to Meany. The subject matter of claim 8 is disclosed in the patent to Hansen. Claims 4, 5, 15 and 16 merely define non-patentable design preferences over the prior art.

In summary, we are satisfied that claims 1-6, 8, 12, 15 and 16 do not define patentable subject matter over the cited prior art.

The second question to be decided is whether claims 7, 9-11, 13 and 14 define patentable subject matter. These claims were rejected for the first time in the Final Action.

Claim 7 includes a guide roller means located in a particular area which contacts at least one of said main lines and said load lines. Claims 9 and 11 include slip clutch means in the interconnecting means. Claims 13 and 14 define grapple connectors and their operation. These features are not disclosed in the references, and in our view the subject matter of claims 7, 9, 11, 13 and 14 is distinguishable from the prior art cited.

When we turn to claim 10 we find that it is dependent on rejected claim 1 and adds the following: "...means for rotating the load line sheave at a slightly faster rate than the main line sheave...." The Hansen reference covers this feature on page 2 at line 44, which reads: "While the two sheaves may be made identical in diameter, it is preferrable that the tong line sheave be slightly greater in diameter...(so that) sheave 3 moves at a slightly greater circumferential speed...." Claim 10, therefore, in our view does not define any patentable advance over the prior art.

There is, however, another matter to consider. Mr. Ellis in response to the Final Action, and also at the Hearing, objected strongly on procedural grounds to the rejection of claims 7, 9-11, 13 and 14. In his view only a second or subsequent action of an examiner should be made final under Section 46 of the Patent Rules. Since these claims were first rejected in the final action itself, he argued the rejection was improper. In so far as claims 7, 9, 11, 13 and 14 are concerned, this objection is immaterial, as we have found those to be allowable claims. In respect to claim 10, however, the objection is germane, since in our view the claim should be refused.

In considering this point, it may be noted that the examiner has not raised new grounds for rejection, nor cited new art. What he has done is extend the same objection to additional claims. In so doing he undoubtedly wished to avoid delaying prosecution further, or putting the application to a second final rejection, with all the expense and difficulty that would entail for the applicant.

Nevertheless, this method of proceeding could be interpreted, as the applicant suggests, as being contrary to the "intent" of Section 46(1) of the Patent Rules. It may have introduced some short circuitry into a thorough discussion of the merits of those claims at the examination stage. We believe there was such a thorough discussion and consideration at the hearing stage, but feel that if the applicant wishes claim 10 to be returned to the examiner for a second action, he should be afforded such a consideration. We have, however, indicated our own findings on the detailed evidence and arguments provided at the Hearing by Mr. Ellis so that the applicant may assess whether it would in fact be desirable to make such a request. In our view it is quite clear that claim 10 is unpatentable in view of the Hansen reference, and that no argument or amendment could overcome the objection.

To summarize, the Board is satisfied that claims 1-6, 8, 10, 12, 15 and 16 do not define a patentable advance in the art beyond that disclosed in the references cited, and in common practice, but that claims 7, 9, 11, 13 and 14 are acceptable.

The Board recommends therefore that the rejection of claims 1-6, 8, 12, 15 and 16 be affirmed, that claims 7, 9, 11, 13 and 14 be accepted, and that claim 10 be refused subject to the provision

that this claim be returned to the examiner for further consideration if the applicant request that such be done. Otherwise claim 10 should also be refused.

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

I concur with the findings of the Patent Appeal Board. Accordingly, I refuse to grant a patent containing claims 1-6, 8, 12, 15 and 16, but will accept claims 7, 9, 11, 13 and 14. Under the circumstances, claim 10 is also refused but will be returned to the examiner for further consideration if requested by the applicant. The applicant has six months to submit an appropriate amendment deleting claims 1-6, 8, 10(if no request is made), 12, 15 and 16, or to appeal this decision under the provision of Section 44 of the Patent Act.

Decision accordingly,

A.M. Laidlaw,
Commissioner of Patents

Dated at Hull, Quebec
this 5th day of December,
1973.

Agent for Applicant

Smart & Biggar,
Ottawa, Ontario.