BELOIT CORPORATION's APPLICATION

5 Patent application—Opposition—Amendment—Whether claim could be limited by intended purpose—Whether claim referring to body of specification clear and succinct—Amendment allowed.

In opposition proceedings the applicants sought to introduce into claim 1, which was for a grooved press roll for paper machines, the words "and the groove and the land being dimensioned and arranged substantially as and for the purposes herein set forth". The hearing officer disallowed the amendment on the ground that the tests necessary to determine whether a particular roll fell within the scope of the amended claim 1 were subjective, in the sense that one needed to know the precise intended use of the roll, and that to allow a claim of such uncertain scope would be to place an unfair and unjustified burden upon the public. On appeal by the applicants to the Patents Appeal Tribunal:

Held, allowing the appeal, (1) that there was not likely to be any real uncertainty as to whether any particular roll would or would not infringe the amended claim 1. The rolls were not items which were bought from the shelves of department stores, but were going to be made for particular jobs. The relevant public to be considered were the makers or users of the particular type of roll and on the disclosure in the body of the specification there was no reason to suppose that they would be in difficulty in coming to a conclusion as to whether any roll they were proposing to make or use would or would not infringe the amended claim. They would know the intended purpose. They would know how far the dimensions matched up with the dimensions indicated in the body of the specification for such purpose.

(2) That the superintending examiner had failed to take into account sufficiently the nature of the article claimed and the way in which it would be used and had reached a wrong conclusion.

(3) That the proposed claim was quite clear and could scarcely be said not to be succinct. The amendment was allowable.

This was an appeal by Beloit Corporation, applicants for letters patent No. 1,048,630, opposed by Black Clawson International Limited, from a decision of the superintending examiner, Mr. N. W. P. Wallace, dated 15th December 1969, refusing...
Mr. Wallace Beloit Corporation’s Application [1974] R.P.C.

inter alia to allow amendment of claim 1. The case is reported only on the issues of amendment.


Mr. Wallace.—The grant of a patent is opposed on the grounds of prior publication, obviousness and insufficiency.

The complete specification is entitled “Improvements in or relating to Paper Machines” and the invention relates to a roll and ancillary equipment for use in paper making machines for dewatering the felt at the felt only press nip and also for dewatering the felt at the web press nip. As shown in figs. 5A and 5B, the roll, which comprises an iron shell 22x and a cover 22a, has a helical groove 22c for receiving the water, the axial width 26 of the groove being less than the axial width 27 of the adjacent land at the roll periphery. Water is removed from the groove by a wiper 29 (fig. 6) consisting of a resilient metal sheet urged against the land areas of the roll 22 and diverging slowly from the off running periphery of the roll. The water is swept out of the groove by air running in to fill the partial vacuum created by the pumping action of the wiper. Water is removed from the land areas by a conventional doctor blade 30 in close proximity to the nip N-3. The groove may be cleaned by a chaser 300 (figs. 7B, 7C) which slidably engages the edge of the doctor blade 30 or a separate element, and carries spaced guide strips 302a-302e riding in adjacent turns of the groove. The central strip 302c rides along the bottom of the groove to clean it.

In order to meet the issues raised, the applicants, in a supplementary counter-statement dated 22nd April 1968, have submitted proposals to amend their specification. The amendments may be summarised as follows:

(i) The replacement of claim 1 by two independent claims 1 and 2, and consequential amendment of the statement of invention in the description.

(ii) The renumbering of claims 2 to 7 as claims 3 to 8 respectively and amendment of the wording of these claims.

(iii) The addition of a further omnibus claim 9 directed to a “paper machine press roll assembly” substantially as described with reference to certain figures of the drawings.

(iv) Minor amendments to the description.

In my view, amendments (iv) are allowable, and the amendments of wording referred to at (ii) are also allowable in themselves except possibly for the introduction of the word “assembly” in new claims 3 to 6 to which I will return later.

Amendment (iii), on the other hand, is in my view not allowable. The applicants say that the introduction of this new claim 9 is by way of correction and is consequential to the amendments to the preceding claims. The applicants have not made it clear what mistake was made in the accepted specification which this amendment seeks to correct but, in any event, I fail to see how the introduction
of a new omnibus claim could be said to be a correction except perhaps if such claim were shown by evidence to have been accidentally omitted, and no such evidence is before me. Further, the introduction of this claim does not appear to be an amendment by way of disclaimer (at least while claims for a roll per se are retained) or by way of explanation. I therefore find that this amendment does not satisfy the terms of section 31(1).

It remains to consider amendments (i). The proposed new claims 1 and 2 read as follows:

1. A paper machine imperforate shell-form press roll (imperforate shell) arranged to rotate about its axis and to present to a pressure nip a peripheral surface portion (comprising) having a helical groove disposed therein, the groove axial width at the roll periphery being narrower than the adjacent land axial width at the roll periphery, and the groove and the land being dimensioned and arranged substantially as and for the purposes herein set forth.

2. A paper machine press roll assembly comprising an imperforate shell-form press roll arranged to rotate about its axis and to present to a felt at a pressure nip a peripheral surface portion having a helical groove disposed therein, the groove axial width at the roll periphery being narrower than the adjacent land axial width at the roll periphery, and the groove and the land being dimensioned and arranged in relation to the thickness of the felt and in relation to the nature of the pressing operation to be carried out substantially as and for the purposes herein set forth.

In the above claim 1, the amendments compared with the old claim are indicated by underlining of the words added and bracketing of the words omitted. In the above claim 2, on the other hand, I have underlined only those words which are additional to those of the new claim 1.

The amendments in the first part of the new claim 1 are I think allowable and the opponents have raised no objection to them. At the hearing, dispute centred largely on the final added phrase "the groove and the land being dimensioned and arranged substantially as and for the purposes herein set forth".

Mr. Lewis submitted that the addition of this phrase and the addition of the similar phrase at the end of claim 2, were not allowable since the precise limits thereby imposed on the dimensions and arrangement of the groove and land could not be ascertained and therefore ambiguity was introduced into the claims. He referred me to a number of passages in the description and submitted that it was not clear to what extent the amended claim 1 was restricted to the features therein described. He also pointed out that the amended claims included claim 7 (corresponding to old claim 6) which was directed to a specified range of ratios between the groove and land areas and submitted, as I understood him, that the presence of this claim and the consequent implication that the amended claim 1 must be broader, raised additional doubt as to precisely what dimensions of groove and land were essential to satisfy the terms of the amended claim 1. The opponents' objection that the dimensions and arrangement of the groove and land have no clear limits defined in the specification is further elaborated in a supplementary

statement dated 9th August 1968 which refers by way of example to further descriptive passages.

Mr. Blanco White conceded that the instructions given in the specification as to how to determine the relevant groove and land characteristics (which include at least land width, groove width, groove depth and groove shape) are complex, and I do not think I need refer to them in detail. To illustrate the point at issue, it is sufficient to take, as an example, a passage on page 6, lines 106-125 which reads:

"The grooves are provided in a size of sufficient magnitude to receive the water load at the press nip, while being vented to ambient atmosphere and thus in a manner so as not to resist flow into the grooves, by virtue primarily of the groove depth (increased groove axial dimensions 16, 26 to accommodate increases in water load). The groove depth 18, 28 in most paper machine uses must thus be substantially greater than the groove opening 16, 26 at the roll periphery, so that the very essential venting function is accommodated. In practical embodiments the ratio of groove depth 18, 28 to groove axial dimensions 16, 26 at the roll periphery is preferably at least about 2 : 1 and may be as much as about 10 : 1 or more depending upon practical, additional considerations such as roll strength, ease of cutting the groove, etc."

It is I think sufficiently clear from this passage alone, and particularly the final sentence, that the teaching of the specification imposes no precise numerical limits, but rather provides guide lines in order to enable the skilled man to determine appropriate dimensions of the groove etc. for a particular roll, once the properties (such as strength) of the roll and the exact use to which the roll is to be put in a paper making machine are known. In other words, the dimensions and arrangement cannot be determined without paying regard inter alia to purpose, and therefore, to make reasonable sense of amended claims 1 and 2, the words "as and for the purposes herein set forth" must be taken together.

As for the "purposes" set forth, Mr. Lewis made two points.

Firstly, he submitted that the description did not make it clear exactly what the purposes of the invention were and, in any case, it was not clear whether a roll would infringe the amended claims so long as it satisfied an individual purpose or whether the "purposes" had to be taken cumulatively. For example, he referred to the passage on page 7 line 61 et seq. which deals with the importance at least in the case of high quality webs, of keeping the axial width of the groove sufficiently small so as to avoid "shadow marking", and he submitted that it was not clear whether or not a roll which shadow-marked a web fell within the amended claims. In my view, on a fair reading of the specification, it is apparent that the primary purpose of the invention is to remove water from felt at a press nip in a paper making machine, and that this purpose implies certain subsidiary purposes such as ensuring that the groove provides sufficient accommodation for the expected water load and also ensuring that the water readily enters the groove. I therefore construe the words "for the purposes herein set forth" as being directly essentially only to this primary purpose and whatever subsidiary purposes are thereby implied, and on this point of objection I find the added phrase to be sufficiently free from ambiguity.

Secondly, Mr. Lewis submitted that the amended claims, and claim 1 in particular, depended, for the understanding of their scope, on features which were not present.
in the claims. Moreover, these features were not objective, since they were dependent on the kind of operation to be performed (e.g. whether the roll was to be used at a felt only press nip or at a web press nip), the precise amount of water to be removed and so forth. Indeed, Mr. Blanco White conceded, as I understood him, that the amended claim 1 was such that whether a roll with, say, particular groove dimensions would infringe the claim was not a matter which could be determined by inspecting the roll in question or even by performing objective tests or measurements on the roll, since it would depend on the precise circumstances in which the designer intended that the roll would be used in a paper-making machine. Thus a given roll, if considered for one use involving a particular water load, might infringe, whereas the same roll, if considered for another use involving a greater water load might not infringe, because the groove would be too small for the intended purpose. In fact, when one comes to claim 2, the point is brought out explicitly by the added words “in relation to the nature of the pressing operation to be carried out”.

Mr. Blanco White suggested that the amended claims were analogous to the form of claim held to be admissible by the Court of Appeal in No-Fume Ltd. v. Frank Pitchford & Co. Ltd. (1935) 52 R.P.C. page 231. The claim in question was for an “ash receptacle” defined partly by construction and partly by a result to be achieved, viz., that smoke should be entirely trapped within the receptacle. It is to be noted that the claim was such that whether a particular ash receptacle fell within its scope could be determined by simple objective tests. Moreover, Maugham, L.J. on page 249 lines 45-47 of this reported case, laid down the general rule that the specification must be as precise as regards the area covered by the invention as the case admits of. In the present case, on the other hand, the tests necessary to determine whether a particular roll falls within the scope of the amended claim 1 are subjective in the sense that one needs to know the precise intended use of the roll; to allow a claim of such uncertain scope would be, in my view, to place an unfair and unjustified burden upon the public. Further, I am not satisfied that the scope of the present invention is incapable of more precise definition.

In the exercise of the Comptroller’s discretion, I therefore refuse to allow claim 1 to be amended as proposed because in my view the final added phrase introduces ambiguity into the claim, and I also refuse to allow the proposed claim 2 for a similar reason. These findings were communicated to Mr. Blanco White at the hearing and I therefore add, for the avoidance of doubt, that the time for appeal shall run from the date subscribed to this decision.

Regarding claim 2, there are two other matters which I should mention. Firstly, Mr. Lewis submitted that there was no justification for claim 2 at all, since the introduction of this claim was not an amendment by way of disclaimer, correction or explanation. Mr. Blanco White, on the other hand, argued that the replacement of old claim 1 by the new claims 1 and 2 was a permissible amendment by way of disclaimer. Since claim 2 is open to other objections, it is not necessary for me to come to a definite finding on this matter at this stage. It might be helpful, however, to express my prima facie view that an amendment comprising the replacement of one independent claim by two new narrower independent claims both falling wholly within the scope of the old claim might in some circumstances be an allowable amendment by way of disclaimer within the terms of section 31(1). Secondly, Mr. Lewis objected to the introduction of the term “assembly” as, in a sense, extending the scope of the claim in so far as it brought in parts of the paper machine not...

explicitly covered by the old claims. Mr. Blanco White defended the introduction of the word “assembly” on two counts, viz., that claim 2 brought in the felt at the pressure nip and therefore it was inappropriate to claim the roll except as part of a larger installation which provided the nip, and that it was necessary to have a claim to an assembly in order to provide a suitable claim on which to tie appendant claims 3 to 6 (corresponding to old claims 2 to 5). As to the felt, it is to be noted that this does not itself form part of the “assembly” claimed in claim 2 and moreover the characteristics of the felt to be used with the claimed “roll assembly” are not defined. Thus the introduction of this “felt” feature is in any case objectionable since, in so far as it adds anything at all, compared with the amended claim 1, it brings a further subjective element into the claims. Regarding the relationship with the appendant claims, it is true that old claims 2 to 5, although directed in terms to a “press roll shell”, in fact introduce additional elements such as a “wiper” and “doctor means”, and therefore some clarifying amendment of wording seems necessary. However, as Mr. Lewis pointed out, there is a difference between claiming an “assembly” at large of which only one ingredient was specified and claiming, for example, an “assembly of press roll shell and wiper”. In my view, the introduction of the term “assembly” into the amended claims introduces obscurity, but the introduction of the term would be allowable if it were used, as in the quoted example, to refer to a combination of which the elements are explicitly mentioned.

Since I have rejected the amended main claims, I will consider how far the opponents have made out their case against the unamended claims.

[The hearing officer then went on to consider objections of prior publication, obviousness and insufficiency.]

To sum up, I find that the amendments proposed by the applicants are not allowable in the respects I have indicated. In particular, I refuse to allow the proposed new main claims 1 and 2 and the proposed new omnibus claim 9. Further, I find that the unamended claim 1 fails for anticipation and the unamended claim 3 fails for obviousness. I defer final consideration of the ground of insufficiency. If the applicants wish to proceed with their application, they should submit alternative proposals for amendment within six weeks from the date of this decision. Thereafter, I will determine the further course of these proceedings. The question of costs is meanwhile deferred.

On appeal to the Patents Appeal Tribunal the parties were represented as before.

Whitford, J.—In the manufacture of paper it is necessary, when the pulp is first separated out in the form of a web, to provide means by which excess water can be removed. In the machines in which paper is produced in the form of a continuous strip this has long been done by passing the web, first produced as a pulpy mass, through a nip formed between oppositely rotating press rolls. It was customary to pass the web through the nip in engagement with a felt into which water would be forced. At the higher speeds of operation which gradually came into vogue the problem of removing enough water efficiently quickly became increasingly difficult. The specification of application No. 1,048,630, the application in dispute, acknowledges that previous expedients had been proposed to assist in removing the water from the web through the felt.
The specification says that previous arrangements suffered from the disadvantage of necessitating complex additions to the plain press roll for supporting the felt and in the broad terms of the original claim what the applicants proposed was the use of a press roll, in the form of an imperforate shell, having on its peripheral surface a helical groove. The axial width of the groove according to the claim had to be narrower than the axial width of the adjacent surfaces (the lands) on either side of each turn of the groove. Figures 5A and B of the specification show the construction claimed. The web 6 lies on the felt 23. A rubber or stainless steel cover on the imperforate shell has grooves 22c which are narrower than the adjacent land areas 22b.

There are other features alleged to be inventive. These form the subject of subsidiary claims. A wiper is proposed in the form of a member having an axially continuous surface which extends from a position in which it is in close proximity to the surface of the roll gradually away from the surface in the direction of rotation. The object of the wiper is the displacement of the liquid from the groove (see original claim 2 and the member 29 in figure 6).

An axially continuous doctor blade is proposed to remove liquid from the lands area during rotation (see original claim 3 and the member 30 in figure 6).

Claim 4 relates to a cleaning device which has a plurality of spaced guides slidably received within adjacent turns of the groove. Claim 5 is tied to claim 4 and nothing turns on it.

Claim 6 limits the grooved areas to a maximum of 25 per cent of the total area and the groove/land area to a maximum ratio of 1:4 or 1:3. Claim 7 is tied to description and drawings of figures 5A and B already referred to and is not the subject of attack. When opposition was entered there was an allegation of anticipation of claim 1 by U.S. No. 1,123,388. The applicants accept their original broad claim 1 is anticipated by this document and they seek to meet the objection by substituting for the original claim 1 two amended claims.

The argument on the appeal centres in the main on the permissibility of the amendments.

The remaining grounds of objection in the original opposition were obviousness as against original subsidiary claims 2-6 and an objection of insufficiency.

So far as obviousness is concerned the superintending examiner found for the applicants on original claims 2, 4, 5 and 6, and as I have already said original claim 7 appears not to have been challenged. Original claim 3 was held to add nothing to original claim 1. There is a cross appeal on the decision on original claim 6 but the other subsidiary claims need no other separate consideration.

The objection of insufficiency was based on an allegation that features apparently necessary to the invention were not to be found in original claim 1. The superintending examiner appears to have thought that prima facie there was substance in this objection. Having rejected the proposed amendments to claim 1 he deferred consideration of the objection of insufficiency pending the reformulation and submission of a suitably amended main claim.
I turn first to the point of principal importance which is whether amended claims 1 and 2 should be accepted as meeting the opposition. The opponents support the ground on which the superintending examiner rejected amendment and by a respondent's notice add further that claims 1 and 2 proposed are neither clear nor succinct and are open to other objections.

To appreciate the point on amendment it is necessary to refer to the anticipatory document. The alleged anticipation dates back to 1915. It is United States specification No. 1,123,388. There is no suggestion that the rolls described in this document were ever used either in the United States, or this country, or anywhere else. The United States specification is concerned with the manufacture of wood pulp and paper. It proposes the formation in the surface of a press roll or a helical groove having a cross section narrowing radially inward. It specifically suggests that this can be achieved by winding a metal wire spirally around the roll. At least one of the figures shows a groove whose axial width is narrower than the axial width of the adjacent lands. The document is in no way specifically related to the treatment of a web of paper travelling on a felt. It is indeed suggested that this roll can be used as a replacement for a felt. The document draws no particular attention to any significance in narrowness of the grooves in relation to the lands area. It dwells upon the requirement that the groove shall narrow radially inward and it contemplates that the pulpy material being pressed will to some extent at least be pressed into the grooves.

The specification of the application is very much concerned with the precise relationship of groove superficial area to land area and gives detailed instructions as to dimensions of groove and land areas suitable for particular circumstances. Groove widths and depths are given and we are told, in contra distinction to specification No. 1,123,388, that the groove sides should be parallel or substantially parallel.

In the specification of the application we are told, and numerous illustrations of this are given, that the exact measurements will vary according to, for example, such factors as felt thickness and the position of any particular roll. In a paper marking line assembly there may be more than one press roll. The amount of water to be removed may vary according to the position of the press roll in the line. Dimensions will vary according to the amount of the water to be expressed. In the specification of the application there is a particular warning against "shadow marking" if groove width be too great. "Shadow marking" will occur if there is any tendency for the paper to be forced against the groove edges. This must be contrasted with the disclosure in No. 1,123,388 which specifically proposes the pressing of the material not only against the edges of, but in fact into, the groove. The American document is obviously not concerned with producing a smooth unblemished sheet at all.

It is apparent on the disclosure in the body of the specification that distinctions can be drawn on which claims can be formulated which would not be anticipated by No. 1,123,388. The applicants formulate claims that they say are not anticipated and in formulating their amendments they have also borne in mind the complaint of the opponents based on insufficiency; the suggestion referred to in the decision that features described in the body of the specification as necessary to the invention are not included in the main claim.
No doubt the sort of features that the opponents had in mind on the question of insufficiency were the requirements referred to in the body of the specification that, for example, the sides of the groove should be substantially parallel and the precise limitations to the particular groove dimensions and land areas which are referred to in the body of the specification. The original claim 1 of course only specified a very general relationship.

To meet all these objections the applicants proposed the claims which are set out in the decision and which I need not repeat here. The superintending examiner has very helpfully underlined the added words and bracketed the omitted words in the amended claim 1 so as to give a direct comparison with the old claim 1. So far as new claim 2 is concerned the underlining indicates words additional to those to be found in new claim 1.

The Patents Act makes no specific provision for amendment in opposition but it must be accepted, and this practice has obtained for many years that any amendment in opposition must fall within the general limitations imposed by the Act. Amendment in opposition, as in any other circumstances, is a matter of discretion. Further it has often been held, and in my view rightly held, that in opposition proceedings only such amendment as is necessary to meet the objections raised should be permitted. In this case it is plain that mere anticipation might have been avoided by the adoption of some precise numerical limits which would avoid the effect of the cited U.S. specification. The difficulty that arises here is that the specification of the application makes it clear that the dimensions will vary according to purpose. Considering the amended claim 1 I agree with the superintending examiner that the words "as and for the purpose herein set forth" must be taken together. What the applicants say they have done is to formulate a claim in which dimensional limitations are related to purpose.

The objection of the opponents that the introduction of the words "for the purposes set forth" involves an inherent ambiguity and is therefore not permissible was in my view rightly rejected by the superintending examiner. The "purpose" of the specification is plainly removal of water from paper carried on a felt without shadow marking, or with no more shadow marking than can be tolerated, by a roll so grooved as to permit a sufficient removal having regard to the particular water load to be dealt with. The difficulty felt by the superintending examiner which was pressed upon him by the opponents and was pressed upon me on appeal lies in this that it might be said that by the introduction of these words the test of infringement has been made a subjective test. The superintending examiner so found. So far as any particular roll is concerned it is suggested that it would be impossible to tell whether it fell within the claim or not until its intended purpose was known. The superintending examiner took the view that the allowance of a claim of such an uncertain scope would place an unfair and unjustified burden on the public. If I thought that there was likely to be any real uncertainty as to whether any particular roll would or would not infringe the amended claim I would agree with the superintending examiner. These rolls are not however items which are bought from the shelves of department stores. They are going to be made for particular jobs. True it is that if the patentees just came across a roll made by some third party they might be in difficulty, on the evidence of that roll alone, in establishing infringement. This however to my mind is not the point. The relevant public here to be considered are the makers or users of this type of roll. They will know the purpose for which they are making or using any roll and on the disclosure in the body of
the specification I see no reason to suppose that they would be in the difficulty in coming to a conclusion as to whether any roll which they were proposing to make or use would or would not infringe a claim in this form. They would know the intended purpose. They would know how far the dimensions matched up with the dimensions indicated in the body of the specification for such purpose.

Claims in the form "dimensions and arranged substantially as herein set forth" are commonplace enough. Limitations to purpose may or may not be significant in the circumstances of any particular case. Where as here, and we are clearly told about it in the body of the specification, dimensions may vary with purpose the claim may well be insufficient, as the opponents suggested in relation to the original claim 1, unless the limitations as to dimensions are coupled with limitations to purpose.

I think in reaching the conclusion which he reached that the scope of the claim was not precise enough the superintending examiner failed to take into account sufficiently the nature of the article claimed and the way in which it would be used and that he accordingly reached a wrong conclusion.

As to the further arguments put forward by counsel for the opponents I should deal shortly with a point which he made that as the amended claim must be taken as bringing in the whole of the body of the specification it could not be regarded as "clear and succinct" as required by the Act. If this general argument be right then claims in a form which have been known and accepted for years have been wrongly accepted. I think there is no substance in this point. It is further at variance with the complaint which his clients have made that the original claim did not include features necessary to the invention. It might be possible on a disclosure such as this to produce a précis of the clear directions given in the specification in the form of a claim or claims. Any such claim or claims must necessarily be long and I think that the form proposed is quite clear and can scarcely be said not to be succinct.

It was said that the dimensions of groove encompassed by the amended claim are not sufficiently and clearly defined. I think that by straightforward reference to the body of the specification there is ample clarity on this point. I have already dealt with the remaining question argued which is the question of ambiguity in relation to purpose.

In the result in my view this appeal should succeed on amended claim 1.

Little was said about amended claim 2 on the appeal. On the superintending examiner's findings claim 2 of course had to fall with claim 1. Certain other points are however mentioned in the decision. Although he did not come to a final conclusion the superintending examiner was not inclined to reject claim 2 as he was asked to do, merely on the basis that it is impermissible to replace one claim by two claims. Like the superintending examiner I do not propose to make any finding on this point because it was not really argued before me. From what I have already said however it follows that I differ from the view expressed by the superintending examiner that the introduction of the reference to a felt introduces a further subjective element. I agree with the view of the superintending examiner that in the present form of the claim the use of the word "assembly" presents some difficulty. Amended claim 2 would not in my view be open to objection in this respect if it
were made into a claim for an assembly of a number of items in the manner of the example given by the superintending examiner in his decision.

[The Tribunal then considered a cross-appeal by the opponents as to the obviousness of claim 6.]

In the result the appeal succeeds and the cross-appeal fails, and must be dismissed. The case must be remitted to the Patent Office where the questions still arising on amended claim 2 will have to be dealt with. I award the applicants Beloit Corporation 75 guineas as a contribution to their costs and direct that this sum be paid to them by the opponents.

Order accordingly.