

COMMISSIONER'S DECISION

OBVIOUSNESS: Roll Label

The invention is for a roll of labels which are precut and preprinted so they can be readily affixed to plastic or glass containers. This application is a division of the labelling machine used therewith. It was decided sufficient ingenuity was exhibited to allow the claims.

Rejection: Reversed

The Final Rejection of patent application 094,016, (Class 40/23) was referred to the Patent Appeal Board for consideration. There was a hearing before the Board on February 18, 1976, at which Mr. O'Gorman made oral submissions on behalf of the applicant. The inventor is Herbert LaMers, and the title given to the application is "Labelling Apparatus."

The invention claimed in this application is a roll of labels adapted to be used in the labelling machine protected by Canadian patent 860,753, January 12, 1971. The application is a division of the one which matured into that patent, and the same inventor is common to both. During the prosecution of the patent, the examiner held that the label roll was for a different invention than the labelling machine, and applied Section 38 (though the report incorrectly referred to Section 36). The divisional application resulted from that objection.

The labels and equipment are used in high speed packaging of a variety of goods, such as plastic or glass containers for detergents, beverages and foodstuffs. The labels are preprinted on the roll, and precut so that they may be readily punched out from it when they are affixed to the containers. Both edges of the roll contain sprocket holes used to feed the roll forward.

In the Final Action the examiner refused the application for lack of patentable subject matter in view of certain prior art references, and common general knowledge. The references cited are as follows:

Canadian Patent	414,033 694,818	July 20, 1943 Sept 22, 1964	Sherman Mitzer
United States	2,259,358	Oct. 14, 1941	Templeton
French Patent	1,095,874	July 7, 1955	Burgner

In that action the examiner made the following objections:

Applicant by his amendment to the claims, which are directed to a roll of paper, now includes therein apparatus limitations and operational steps carried out by the apparatus. These limitations are admitted by applicant's argument "the claimed subject matter is defined and limited in part by the apparatus with which the subject matter is used". However it is held that claims directed to a supply of material such as a roll or strip of paper cannot rely for novelty, and therefore invention, either on structural features of a particular apparatus in which it is proposed to use the paper or on details of some operating step carried out by such an apparatus. To be patentable, such claims must not only define structural features by which the strip or roll distinguishes from all other previously known strips or rolls but such novel structural features must be unobvious and ingenious to an extent meriting the grant of monopoly privileges. Neither the supplying of a precut strip to suit a modified cutterless labeler, nor the common knowledge roll form of the supply can be seen to be of any patentable significance. Claims 1 and 4 to 7 therefore stand rejected. Furthermore claims 2 and 3 specifying U-shaped sprocket holes and captive tabs add nothing of an inventive nature to claim 1 and are also rejected.

It is maintained that applicant, by removing the cutting stage from the sequential multi-operation machine of Sherman creates a problem in that his modified device will not function with the uncut supply strip of Sherman. This is the only "problem" solved by the precut web defined. It is further maintained that the concept of incorporating pre-cut in a Sherman type supply strip to suit a Sherman type of device which has been modified by eliminating the cutter therefrom lacks inventive ingenuity over Sherman. Whether the cutting is carried out on the labeler as in Sherman or geographically separate from the labeler as in the instant disclosure is an obvious optional matter of choice. However having made the choice, it is not only obvious but essential for the operation of the modified labeler that the supply strip be precut. In these circumstances, where nothing unobvious results, the precut supply strip is not per se unobvious or inventive.

Considering the structural limitations recited in the claims, as opposed to the apparatus and operational limitations mentioned above, the only features defined in claims 1 and 4 to 7 which are not taught by Sherman is the end to end extent of the cuts and the "roll" form

of the supply. As stated above, the mere supplying of a pre-cut strip to suit the modified cutterless labeler is of no patentable merit. Furthermore the roll form of a label supply is common general knowledge and its recitation adds nothing of an inventive nature to these claims.

It is obvious that the notched knife of the cutting die 28 as shown in Figure 6 of Sherman will produce the well known non-continuous outline cut exactly as defined in the claims. Thus, apart from the end to end extent of the cut portion and the roll form of the strip, the Sherman patent shows all of the structural details defined in claims 1, 4, 5, 6 and 7. The applicant in the original disclosure teaches that "while a piston operated plunger can be used...a variety of other types of apparatus can be used... or a blast of air can be used to detach the label from the surrounding web". Applicant's strip therefore is not designed exclusively to suit a plunger as may be inferred from the wording of claims 1 and 7. Further, the original disclosure merely states that the strip is of plain paper and that the ends of the cuts are spaced from each other to form bridges 122 each of a width W. There is no teaching either that the paper has one of its surfaces especially "adapted for receiving adhesive" or that the widths of the "bridging means" are predetermined or pre-selected in any way to suit any special type of apparatus, as implied by claims 1 and 7. These features therefore cannot be relied upon, either individually or in conjunction with other features, to define invention.

Neither the supply of a pre-cut strip to suit a modified cutterless labeler as noted above nor the common knowledge roll form of the supply can be seen to be of any patentable significance.

In the response dated February 2, 1975 to the Final Action the applicant stated (in part):

In claim 1, applicant does not specifically rely on the features of the apparatus with which the label supply is used or upon the operation of that apparatus. Quite to the contrary, the claim is drawn to a label supply and to a specific bridging means which holds the label within the web remnant. Those bridging means are simply defined by reference to the resilient plunger of the apparatus in which the label supply is intended for use, whether or not such a resilient plunger is actually used. Thus, the claim does not include features of the apparatus with which the web is used, as positive elements but rather only defines the web in terms of the apparatus. Applicant believes that this format is clearly proper.

Indeed, it goes directly to the heart of the invention which lies in the particular specification of the label bridges which are defined in relation to the nature of the article-applying plunger. In this regard, it is critically important, not that a resilient plunger can be used, but that the bridges have a certain width which is specifically defined as that width which permits label detachment by a resilient plunger. Reference to a resilient plunger is not immaterial or inconsequential, but rather provides a basis for a specific description of a positive element of the claim. The phrase

specifically defines the width of the label supporting bridges in terms which go to the heart of the invention. The width of the bridges is exactly that which will permit the labels to be removed by a resilient plunger.

This is a case where the invention, to a large extent, lies in defining the parameters of a structural component of the claimed combination in terms of what it is capable of doing. The term so defined is structural within these bounds and the aforementioned phrase is believed to be of great patentable significance, in combination with the other features of the claim. To this extent, the phrase is not considered to be any different than the normally used and patentably descriptive terms, such as "rotatably" or "slidably" mounted, for example.

and

A number of advantages of the specifically claimed label supply have already been disclosed to the Patent Office. To reiterate, however, it should be pointed out that insofar as die-cut labels are concerned, the claimed subject matter supplies the possibility of unlimited label shapes, an advantage not heretofore known with respect to label supplies. A further advantage is that the claimed label web permits the use of adhesive over the complete surface of the labels. Since the prior webs were required to be sheared or cut off by some mechanism at the removal station, adhesive out to the extreme label edges was not practical due to the fact that it would tend to bind or seize the cutting apparatus. Since no cutting apparatus is required with applicant's label, due to the concept of providing the bridges as claimed, overall adhesive application to the extreme label edges can be practically utilized. There are no cutting dies to foul.

Another important advantage of the claimed label supply is that it makes possible the elimination of any cutting equipment required in the labeling operation itself. Such cutting equipment not only increased the cost of labeling apparatus, but also required maintenance and trained operators for the cutting operation. Since the label supply as claimed is cut on a different apparatus, the label webs can be stock piled and malfunctions in the cutting devices do not require shutdown of the complete labeling operation. Certainly, these are advantages of the complete labeling system, but they all stem from one basic theory: the structure of the web.

and

The applicant submits that none of the prior art discloses or suggest the need for a label supply structure as set forth in claim 1 or claim 7 and believes that the claimed subject matter cannot be considered obvious, where the concept of both removing a label from the web and applying it to an object with the same resilient plunger, was unknown until the applicant's own disclosure. In the prior art, there is no reason for, or suggestion of a label web in which the labels are held by bridging means of a thickness selected to permit removal of the labels from the web by a resilient plunger without indiscriminate tearing of the label. The applicant therefore believes that the Examiner's suggestion that the claimed structure is obvious in view of Sherman, or any of the other references, can only be made with hindsight, and with the benefit of the applicant's own disclosure.

The Sherman patent relates to an envelope and package addressing apparatus which applies address labels to envelopes and small packages in a continuing succession. A folded uncut web (or length of paper) with address labels printed thereon is fed to a reciprocating cutter to score the label area of the web. The next stage is a heating station where the legend bearing label is stuck to the envelope, which moves with the web to the punch stage. At this location a punch press is used to detach the label with its attached envelope from the web. Claim 1 of this patent reads:

In a label applying apparatus, strip feeding means for advancing a legend bearing strip through successive step-by-step movements, a unit supply magazine and a unit depository over which the strip is advanced, a scoring die past which the strip is advanced for outlining by weakened division lines succeeding legend bearing portions of the strip to be detached therefrom, an applicator in registry with the unit supply magazine operative to adhesively attach an outlined legend bearing portion of the strip to the uppermost unit in the magazine, and a detaching device in registry with the unit depository and into registry with which the attached legend bearing portion of the strip and the unit to which it is attached is advanced by the advancement of the strip and operative to detach from the supply strip the legend bearing portion thereof attached to the unit.

The Metzner, Templeton and Burgmer patents disclose web feeding sprocket holes which are arranged in longitudinal series at the longitudinal margins of the web. Metzner and Burgmer have their sprocket holes formed of U-shaped cuts in the web which form tabs or flaps within the cuts. These flaps are pushed aside when engaged by the sprocket wheel but remain attached to the web. Similarly Templeton uses a T-shaped cut to form his sprocket hole. Each of these citations show a "captive tab" arrangement to overcome the problem of loose paper confetti being displaced from the sprocket holes and clogging up the equipment.

As mentioned previously, the applicant's label supply reel consists of a web with precut labels therein, and spaced sprocket holes adjacent to the longitudinal margins of the roll. The problem of clogging with confetti from the sprocket holes is eliminated by using tabs or "U"-shaped cuts to form the holes.

Claim 1 reads:

A rolled, pre-printed, pre-cut label supply including an elongated web supporting labels therein, for use in apparatus adapted to apply labels to products, said apparatus including means for establishing a tacky surface to one side of said labels, a reciprocating resilient plunger means for engaging labels, for passing through said web and detaching labels therefrom, for carrying labels toward and applying labels to products, and thereafter withdrawing through a web remnant, said resilient plunger means having a forward label engaging face with a predetermined shape, and sprocket means for transporting said web through said label applying apparatus, said pre-printed, pre-cut label supply comprising: an elongated single-ply web in the form of a roll including a plurality of labels and a web remnant to which said labels are attached, said labels being located throughout said remnant from one end to the other of said web, said labels being partially cut from said web remnant by a plurality of cuts extending completely through said web, the ends of said cuts being spaced apart to leave bridging means between said labels and said web remnant thereby to releasably hold said labels in said remnant, said bridging means having predetermined widths selected to permit the detachment of said labels by said resilient plunger, transversely to said web remnant, without indiscriminate tearing of the label, said labels having two sides, each free from adhesive, one of which sides is adapted for receiving adhesive and another side which bears printed indicia, and sprocket holes in said web remnant and extending therealong, said sprocket holes disposed in said remnant to permit accurate registration of said remnant and said labels with respect to said resilient plunger.

The question to be decided is whether the application is directed to a patentable advance in the art.

This application is a divisional of Patent No. 860,753, which issued with 19 claims for the apparatus to apply the labels. Operation of the apparatus requires some form of label supply arrangement, and that is the basis for this application.

In the Final Action the examiner maintained that by removing the cutting stage from Sherman's device, the applicant in fact "creates a problem in that his modified device will not function with the uncut strip of Sherman." Sherman uses a folded web supply which has legends imprinted thereon. At the first stage of his operation Sherman uses a reciprocating cutter to score the legend-bearing area of the web. Next the web advances to the heating station where the legend is attached to the envelope and then the web proceeds with the envelope adhered to the label to the presser head which separates the legend area from the web. Sherman was concerned with labelling envelopes or small packages in which the web advances the labelled article through one stage of machine operation. In order to perform this function Sherman

fastens the article to the web, and advances it to the punch station. In our view there is no indication that Sherman envisaged the use of prepunched supply reel or that he would apply the label to an article without moving the article via the web to the next stage of operation.

At the hearing it was pointed out by the examining staff that in figure 5 of Sherman the label supply arrangement shown is nearly identical to the applicant's. Figure 5 of Sherman is a perspective view of the web as it moves through the apparatus. This figure shows the web starting with a legend imprinted thereon (3), succeeded by a scored area (36) depicting what occurs at the cutting station, and then followed by a representation of a detached label adhered to the envelope below the advancing web (at 35). In looking for similarity between Figure 5 of Sherman (which shows only one scored label) and this application, we note that figure 5 of Sherman does not show a "rolled precut label supply" such as that contemplated by the applicant. In Sherman there is only one precut label at a time, and that immediately before it is affixed to the envelope.

In developing his invention the applicant devised an apparatus for applying labels, and in conjunction therewith a label supply. The apparatus required a special label supply arrangement and the applicant developed a prepunched label reel for that purpose. His arrangement did not have the web advance with an article attached to it through one stage of the operation, such as occurs in Sherman. Consequently he used a prepunched label supply wherein the prepunched area represents a relatively large portion of the web, which means that the web would not be strong enough to carry any article attached to it. Therefore in order to fulfil his concept the applicant developed a novel prepunched reel label supply to coact with his label applying apparatus.

The Final Action also made reference to Canadian Patents Nos. 761,791 to Huffmann, and 728,557 to Sonenberger, which are of record in the prosecution of this application. Huffmann describes data card production from a supply

web of continuous length. This web moves rapidly through a punching and slitting machine using rotary-punch rolls. Sonberger relates to tabulating cards which are adapted to be processed through high speed printers. Fabrication of the card is from a pair of rolled webs which are unreeled and fastened to each other to form layers of the tabulating card. In our view neither of these references display a prepunched reel label supply as envisaged by the applicant.

Affidavits testifying to the commercial success of the invention were submitted by the applicant. They also purport to demonstrate that people skilled in this art consider the invention to be unobvious. In reviewing these affidavits we note that some of their statements relate to the labeling system of La Mers, and we do not doubt but that the inventive concept as a whole is patentable. It resulted in an important advance in the art, sufficient to justify the grant of a patent to the labelling apparatus. We observe that relevant jurisprudence indicates commercial success does not necessarily demonstrate the presence of invention, but it may raise some presumption of invention when a long-unsatisfied demand is met.

At the hearing we were given two further affidavits providing evidence of some significance which was not available to the examiner when he made his rejection. In one, Mr. Thomas Keuper, a labelling expert, in addition to testifying to the commercial success of the LaMers invention, declares that the label supply itself is an important factor in permitting accurate placement of the labels on containers in high speed operations because of the way they are supported by the web remnants. He states: "Highly accurate label placement is insured by the label supply itself." Apparently rejections for faulty labelling were reduced substantially. Mr. Keuper points too to certain advantages in applying adhesive to this type of label. We quote: "Overall adhesive application has not proved successful in other elongated webs of indeterminate length, from which labels are required to be cut on the labeling device after adhesive application to the label, since the adhesive on the edge of the label area tends to seize the cutting die, and to form a "stringy" glue mess in the apparatus." This serves to distinguish this invention from Sherman's.



In his affidavit, Mr. Arthur R. Johnson, another expert, testifies that the LaMers invention has improved the application of the adhesive, which he attributes in part to the construction of the label web. He refers to the fact that previously "it was always believed necessary to remove die-cut labels from webs by cutting within the labeler, and it was not known that labels could be removed in untorn condition without such cutting."

In assessing an invention it is important to avoid ex post facto analysis. This has been stressed repeatedly, most recently by the Federal Court of Canada in its decision of November 5, 1975, as yet unreported, in Pre-formed Line Products and Slater Steel v. Payer and Co. In it we find:

As to the inventiveness, it is at times difficult to distinguish between a true inventive step and a mere workshop improvement of an invention. To constitute an invention, there must be a substantial step forward. On the other hand, great care must be taken in examining an invention ex post facto to determine when there is that element of inventiveness required, for a very great number of extremely useful and truly ingenious inventions often appear to be perfectly obvious and devoid of originality when examined after they have been invented. Refer Appliance Service Co. Ltd. v. Sarco Canada Ltd. (14 C.P.R. 2d, 59 at 69), Farbwerke Hoechst AG., vormals Meister Lucius & Bruning v. Halocarbon (Ontario) Ltd. et al (15 C.P.R. 2d, 105 at 124 & 125) where the authorities cited in The King v. Uhlemann Optical Co., (1950 Ex.C.R. 142 at 157 affirmed 1952 S.C.R. 143) are quoted.

The simplicity of a device is no proof that it was obvious and that inventive ingenuity was not required to produce it and, if small differences create large results, then the scintilla of inventiveness required by law is in fact present. Refer O'Cedar of Canada Limited v. Mallory Hardware Products Limited (1956 Ex. C.R. 299 at 317 and 318).

In this case we do not doubt but that from the art relied upon by the examiner, there would have been little ingenuity in developing the label roll claimed here once the new labelling system as a whole was known, and the need for that roll appreciated. However the point is that the labelling system was not known prior to the LaMers invention. The special label roll required for the system is an integral part of the whole inventive concept, and derives the necessary attribute of inventive ingenuity from that relationship. To combine the applicant's own inventive concept with pieces of prior art to hold the invention obvious is, we think, to practice the type of ex post facto

analysis which has received the disapprobation of the courts. It is easy after a discovery to say that it is obvious. In many cases the merit in an invention lies in recognizing that a problem exists, and if the merit of a case lies in the concept itself, it is not diminished by the fact that the practical application of the idea, when once it is conceived, offers little difficulty. (Reliable Plastics v. Louis Marx et al, 17 F.P.C. 184 at 198.)

Having considered these matters and the advantages flowing from this invention, we are satisfied that the Commissioner ought not to refuse a patent, and that the claims define a patentable invention.

In the Final Action, the examiner objected to inclusion in the claims of apparatus limitations. We agree with him that the apparatus limitations appearing in claim 1 at lines 3 to 10 are immaterial to what is being claimed. The claim is for a label supply and in this instance we do not see how a recitation of the parts of the apparatus in which it is used help define the label supply. In fact we believe they run counter to the requirements of Section 36 of the Patent Act by making less distant and explicit what is the invention to be protected. We understand from Mr. O'Gorman's remarks at the hearing that he had no objection to delete that portion of claim 1 reading: "said apparatus including means for ..... printed, precut label supply" inclusive, and we believe this should be done in the interest of clarifying the claim. The title, too, which is that used in the patent, is inappropriate for what is claimed in this application.

Another objection made by the examiner at the hearing was that the claims contain features not in the disclosure as originally filed. He referred, for example, to such terms as "bridges," "resiliency of plunger" and paper "adapted for receiving adhesive." These terms were accepted, however, on April 4, 1974, when they were submitted, and entered into the application. One of the most significant in serving to distinguish this invention - resiliency of plunger - does have support in the original disclosure at Figure 5, and the bottom of page 8 (formerly page 9). The latter states: "The front plate 99 is covered by a layer 105 of elastomeric material such as soft rubber." Considering

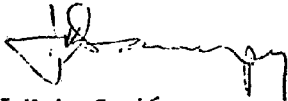
that the labels are to be applied to curved surfaces, and to glass bottles, we think it reasonable to infer that those reading this disclosure when it was filed would recognize that various types of resilient materials could be used.

The Board therefore recommends that the rejection for obviousness be withdrawn. If the claims are amended as indicated above, the application should be allowed to proceed.



Gordon Asher  
Chairman  
Patent Appeal Board

I concur with the findings of the Patent Appeal Board. The rejection of the claims for obviousness is withdrawn. The application is returned to the examiner to require amendments as indicated above.



J.H.A. Gariépy  
Commissioner of Patents

Dated at Hull, Quebec  
this 29th day of March, 1976

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