

COMMISSIONER'S DECISION

CONFLICT - S. 45(4): Unpatentable C-claims Refused Under Ss. 42 and 44

On re-examination, the subject matter of the C-claims refused as unpatentable in view of the teaching of the patent cited under Section 45(4).

FINAL ACTION: Affirmed.

This decision deals with a request for review by the Commissioner of Patents of the Office letter written under Section 45(4) of the Patent Act dated January 22, 1973 on application 077,716, to determine whether the Commissioner of Patents ought to refuse the claims under Section 42 of the Patent Act during conflict proceedings. This application was filed on March 18, 1970 in the name of Warwick W. Olsen and refers to "Improvements in And Relating to Methods Of And Apparatus for Drying Paper."

The Office letter stated in part:

As provided for under Section 45(4) this application is opened for re-examination with reference to the prior art cited below. The application contains conflicting claims C1 to C15 inclusive and claims 1 to 7 inclusive and was last amended on August 1, 1972.

Reference Applied:

Japanese Utility Model Publication No. - 10082/1967 -
Komatsu - June 2, 1967.

Conflicting claims C1 to C15 inclusive are rejected in view of the above cited reference. The limitations of claims C1, C2 and C5 to C14 read directly on the disclosure of the reference. Claims C3 and C4 are deemed not to be patentably different. Although these claims include a feature whereby the longitudinal threads decrease substantially evenly toward the central section this is deemed but a design consideration which although giving a slightly better moisture profile would increase the difficulty of weaving such a fabric. One could carry the alleged invention even further by varying the number of threads from the extreme edge of the wire to the very center i.e. decreasing the threads from the edge to center. Such a refinement is not considered necessary and would further increase the difficulty of weaving. If such a refinement were deemed essential it would take no inventive ingenuity to design such a fabric having studied the wire of Komatsu. The result could well be predicted.

Claim C15 is considered but the obvious and conventional method of using the wire claimed. By 'conventional' is meant drying paper by running the paper over a series of dryer drums using two felts or wires. Komatsu discloses that his wire is used for drying paper but the process is so well known he did not deem it necessary to set forth the method step by step.

The applicant must reply to this letter and either cancel claims C1 to C15 inclusive or show how their subject matter is patentably different from the subject matter of the reference.

The applicant, in the response dated April 19, 1973 to the Office letter, stated in part:

It is respectfully submitted that the requirements for a prior publication to constitute "anticipation" under Canadian Law are well established. For instance, it was stated in Baldwin V. Western Electric; (1934) S.C.R. 94 at 103: "It is well established that for a prior patent to constitute anticipation, the patent must disclose the same or give information equal in practical utility to that given by the patent in question". In the present case, the applicant respectfully submits that the disclosure cited in the communication of January 22, 1973 is not sufficient to constitute anticipation of the invention recited in conflict claims C1 to C15. Although the Komatsu utility model does appear to disclose a dryer canvass with a looser weave in the central portion than at the edges, a drying wire or endless belt with the specific structure recited in conflict claims C1 to C15 is not disclosed.

More specifically, conflict claim C1 recites that "the permeability of the wire varies in the crosswise direction corresponding to the characteristic moisture profile of a web obtained by a uniform permeability wire", and it is respectfully submitted that this specific relationship is not disclosed or suggested by the cited reference. Similarly, it is recited in conflict claim C5 that the permeability of the belt "varies selectively" across the width of the belt, and it is respectfully submitted that this specific relationship is not disclosed by the cited reference.

This application refers to "Methods of and Apparatus for Drying Paper".

More specifically, the applicant employs a screen or drying wire during the drying process, which has a porosity which varies from a high porosity at the centre to a low porosity at the edges thereof. Claims C1 and C3 read:

A drying wire for drying a moist paper web, particularly for a drying section of a paper making machine, said wire being of a permeable structure, characterized in that the permeability of the wire varies in the crosswise direction corresponding to the characteristic moisture profile of a web obtained by a uniform permeability wire so that the permeability is greater in the central portion of the wire than in the edge portions and the moisture content of the resultant dried web is uniform in the crosswise direction of the wire.

A drying wire according to claim C1 or C2, characterized in that the number of the longitudinal threads of the wire is greater in the edge portions of the wire than in the central portion and decreases substantially evenly towards the central portion of the wire.

This rejection was made under Section 45(4) of the Patent Act which reads:

Each of the applicants, within a time to be fixed by the Commissioner, shall either avoid the conflict by the amendment or cancellation of the conflicting claim or claims, or, if unable to make such claims owing to knowledge of prior art, may submit to the Commissioner such prior art alleged to anticipate the claims; thereupon each application shall be re-examined with reference to such prior art, and the Commissioner shall decide if the subject-matter of such claims is patentable.

The issue to be decided, with reference to the cited prior art to Komatsu, is whether the subject matter of claims C1 to C15 is patentable.

The reference to Komatsu relates to a dryer-canvas for paper manufacture and the disclosure of this reference on page 2 line 2 states the problem "...the center of the paper is usually dried to a harder finish than the sides." The object of the invention is then stated as: "Under these circumstances, the present invention aims to provide a means for drying paper uniformly. That is, the object of the invention is to provide an improved dryer-canvas for paper manufacture by which the moisture permeability at the center is improved and the paper is dried uniformly on the whole canvas."

In the reference to Komatsu the canvas is divided into at least three panels: a central panel (a) and two side panels (b) and (c) and the reed count is gradually decreased from both side panels (b) and (c) to the central panel (a), and the center panel (a) can be woven with a somewhat lower density. More specifically, page 2, starting at line 14 of this reference, reads:

As described above, according to the present invention, the density of the warp of the central panel is gradually lessened in comparison with that of both side panels; consequently the

moisture permeability of the central panel is improved. As a result, the present canvas does not have the disadvantage that the center of the paper will include much moisture, as usually observed when conventional canvas is used. Thus, by using the present canvas, the paper can be dried uniformly on the whole canvas.

Claim:

A dryer-canvas for paper manufacture characterized in that the density of warp at the center is lower than that at both sides.

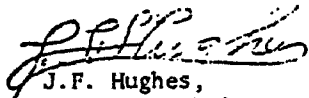
In line with this the applicant stated in the instant disclosure on page 3 beginning at line 19: "In a further aspect, the invention consists in a drying screen for a paper making machine which screen has a porosity which varies from a high porosity at the centre to a low porosity at the edges thereof."

Accordingly, the solution is basically the same with a variation in the formation of the canvas or drying wire. The instant claims specify that the longitudinal threads decrease substantially evenly towards a center section; while the reference to Komatsu decreases the spacing in stages of panels (c) and (b) toward the central panel (a). Admittedly the instant application departs somewhat on this point from the reference, but which is nevertheless substantially taught by the Komatsu disclosure which reads: "...and the reed count is gradually decreased from both sides of panels (c) and (b) to the central panel."

The applicant has advanced the argument that the reference must disclose the same or given equal practical utility to that given in the instant application. In line with this it is held that the limitations of claims C1, C2 and C5 to C15 read directly on the disclosure of the reference to Komatsu. Claims C3 and C4 refer to limitations with reference to: "...the number of longitudinal threads of the wire is greater in the edge portion of the wires than in the central portion and decreases substantially evenly towards the central portion of the wire." The applicant,

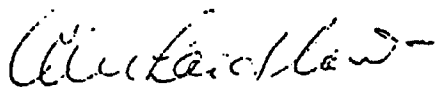
however, has merely followed the teaching of Komatsu by constructing the canvas or drying wire to follow more closely the moisture profile of the paper stock.

The Board is therefore satisfied that the subject matter of claims C1 to C15 is taught by the reference to Komatsu and in accordance with Section 45(4) of the Patent Act, recommends that the Commissioner of Patents should affirm the decision made in the Office letter that the subject matter of Claims C1 to C15 is not patentable.


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

I concur with the findings of the Patent Appeal Board and refuse to grant a patent on the subject matter of claims C1 to C15. The applicant has six months in which to appeal this decision in accordance with Section 44 of the Patent Act.

Decision accordingly,


A.M. Laidlaw,
Commissioner of Patents.

Dated in Ottawa, Ontario
this 12th day of June, 1973.

Agent for Applicant

George H. Riches & Associates, Ottawa.