

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DAVID W. NORWOOD,
ROBERT BROWN
and
EDWARD EARNEST

Appeal No. 1998-2035
Application 08/458,783

ON BRIEF

Before FRANKFORT, NASE and BAHR, Administrative Patent Judges.

FRANKFORT, Administrative Patent Judge.

DECISION ON APPEAL

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Application 08/458,783

This is a decision on appeal from the examiner's final rejection of claims 1-15, 17 and 18, which are all of the claims remaining in the application. Claim 16 has been canceled.

Appellants' invention is directed to an apparatus and method for lubricating and curling a rim of a paperboard container including a curling tool (12) having a curl-forming channel (16a) and an annular porous liquid transfer ring (22) which partially overlaps the curl-forming channel (16a). The porous liquid transfer ring (22) being formed of felt or open-celled foam material to transfer lubricant from an annular channel (20) to the rim of the paperboard container as the container is moved into the curl-forming channel (16a) by the reciprocating motor (12a). A representative copy reproduced from appellants' brief of independent claim 1 is attached to this decision.

The prior art references of record relied upon by the examiner as evidence of obviousness are:

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Buckingham	2,117,295	May 17, 1938
Lyon	2,821,156	Jan. 28, 1958
Ruza	3,087,390	Apr. 30, 1963
Daniels	4,243,079	Jan. 6, 1981

REJECTIONS

Claims 1-15 stand rejected under 35 U.S.C. § 103 as being unpatentable over Ruza in view of Lyon and Daniels.

Claims 17 and 18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Ruza in view of Lyon and Daniels as applied to claims 1-15 above, and further in view of Buckingham.

Rather than attempt to reiterate the examiner's full commentary with regard to the above-noted rejections and conflicting viewpoints advanced by the examiner and appellants regarding the rejections, we make reference to the final rejection (Paper No. 7, mailed December 31, 1996), the examiner's answer (Paper No. 12, mailed June 24, 1997) and a response to appellants' reply brief (Paper No. 15, mailed October 15, 1997) for reasoning in support of the rejections,

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and to appellants' brief (Paper No. 10, received April 11, 1997), reply brief (Paper No. 13, received July 17, 1997), and supplemental reply brief (Paper No. 16, received October 31, 1997) for the arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the

respective positions articulated by the appellants and the examiner.

In rejecting claims under 35 U.S.C. §103, the examiner bears the initial burden of presenting a prima facie case of obviousness (see In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993); In re Oetiker, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992)), which is established when the teachings of the prior art itself would

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appear to have suggested the claimed subject matter to one of ordinary skill in the art (see In re Bell, 991 F.2d 781, 783, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993)). The conclusion that the claimed subject matter is prima facie obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) and In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). When it is necessary to select elements of various teachings in order to form the claimed invention, we ascertain whether there is any suggestion or motivation in the prior art to

make the selection made by the appellants. Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination. The extent to which such suggestion must be explicit in, or may be

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fairly inferred from, the references, is decided on the facts of each case, in light of the prior art of record and its relationship to the appellants' invention. As in all determinations under 35 U.S.C. § 103, the decisionmaker must bring judgment to bear. It is impermissible, however, simply to engage in a hindsight reconstruction of the claimed invention, using the appellants' structure as a template and selecting elements from references to fill the gaps. The references themselves must provide some teaching whereby the appellants' combination would have been obvious. In re Gorman, 933 F.2d 982, 986-87, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991) (citation omitted). That is, something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. See In re Beattie, 974 F.2d 1309, 1312, 24 USPQ2d 1040, 1042 (Fed Cir. 1992); Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Co., 730 F.2d 1452, 1462, 221 USPQ 481, 488 (Fed. Cir. 1984).

With this as background, we turn to the examiner's rejection of claims 1-15 under 35 U.S.C. § 103 as being

unpatentable over Ruza in view of Lyon and Daniels. Before turning to our evaluation of the combination of Ruza, Lyon and Daniels, we look to the language of claim 1 on appeal to derive an understanding of the scope and content of the claim. Claim 1 defines an apparatus for lubricating and curling a rim of a paperboard container comprising a housing block (14) defining a central recess (14a), a curl-forming channel (16a) disposed in the recess for curling the rim of a paperboard container, said housing block (14) defining an annular liquid channel (20) in surrounding relationship to said curl-forming channel (16a) for distributing lubricating liquid, and a porous liquid transfer ring (22) formed of a felt or open-celled foam material, said liquid transfer ring (22) being attached to said housing block (14) in covering relationship to said annular liquid channel (20) so that lubricating liquid saturates said liquid transfer ring (22), said liquid transfer ring (22) includes a circular edge surface which defines a central opening that extends partially over said curl-forming channel (16a) to transfer lubricating liquid to the rim of a

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paperboard container with a wiping contact with said rim.

Claim 12 sets forth a method of lubricating and

curling a rim of a paperboard container using apparatus similar to claim 1, wherein said method includes the steps of effecting relative advancing movement between the housing block (14) having a curl-forming channel (16a) and a rim of a paperboard container, saturating with a liquid lubricant annular porous liquid transfer ring (22) formed of a felt or open-celled foam material which partially extends over the curl-forming channel (16a), bringing the rim of the paperboard container into wiping contact with the annular liquid transfer ring (22) saturated with the liquid lubricant and bringing the lubricated rim of the paperboard container into contact with the curl-forming channel (16a) to cause the lubricated paperboard container rim to be curled thereby.

The examiner (answer, pages 3-4) is of the view that Ruza discloses an apparatus for curling edges of paper cups, said apparatus having a housing block (11), an annular curling

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channel (18), a circular edge surface (29, see Figure 3), a retaining ring which is the recessed portion of housing (25) having threaded apertures (13), a pair of aligned vent channels (12) and the aperture in element (24). The examiner notes that Ruza lacks supplying a liquid lubricant through a porous felt transfer

element upstream of the curling channel. Lyon is directed to a drawing dye apparatus for cupping a metal blank into a cartridge casing and is relied upon by the examiner to suggest "the concept of" providing lubrication via channels (37) prior to the main portion of a deforming die to reduce friction and wear. Daniels is directed to an apparatus for the application of a known quantity of lubricating oil to a wick lubricating system of an electric motor and is relied upon by the examiner to teach "the concept of" transferring lubricating fluid to desired locations using wicks made of felt (23, 29 and 31). The examiner then concludes (answer, page 4) that it would have been obvious to one of ordinary skill in the art to provide Ruza with

felt wicking material saturated with a lubricating fluid for transferring the liquid to the cup rim before it contacts the curling channel in view of Lyon and Daniels so as to further reduce frictional force between the rim of the cup and curling channel and prevent damage to the curled cup.

Appellants argue (brief, page 5) that neither Lyon nor Daniels provides any disclosure whatsoever that would have led an ordinarily skilled person to include a porous liquid transfer ring in Ruza. As set forth above, teachings of references can be combined only if there is some suggestion or incentive to do so.

Here the prior art contains none. The disparate teachings of the applied prior art and the manner in which they are proposed to be combined indicate, in our view, that the examiner has engaged in an impermissible hindsight reconstruction of the appellants' invention using the claims as a template to selectively piece together isolated disclosures in the prior art. Even if the Lyon and Daniels references are considered to be analogous prior art, the

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combined teachings of the applied prior art would not have suggested an apparatus or method for lubricating and curling a rim of a paperboard container including a liquid lubricate transfer ring defining a central opening such that said liquid transfer ring extends partially over said curling channel as required by claims 1 and 12 on appeal. With this as our basis, we cannot sustain the examiner's rejection of independent claims 1 and 12 and dependent claims 2-11 and 13-15 under 35 U.S.C. § 103 as being unpatentable over Ruza in view of Lyon and Daniels.

Now turning to the rejection of dependent claims 17 and 18 under 35 U.S.C. § 103 as being unpatentable over the combination of Ruza, Lyon, Daniels, and Buckingham, we note claims 17 and 18 depend from the method claim 12 and further require that step (a) be practiced by moving said housing block towards the paperboard container rim and further be practiced using a reciprocal motor. The examiner relies on Ruza, Lyon and Daniels to disclose and teach an apparatus for

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lubricating and curling a rim of a paperboard container as set forth above. The examiner notes that the combination of Ruza, Lyon and Daniels lacks a reciprocal motor being used to move the curling tools towards the paperboard container.

Buckingham is relied upon to teach a reciprocal motor (M) moving the curling tool towards a paperboard container. As set forth above, there is no suggestion or incentive to combine the disparate teachings of Ruza, Lyon, and Daniels, without impermissible hindsight reconstruction. Since the rejection of claims 17 and 18 relies upon the improper combination of the above references and since Buckingham does not provide any suggestion or incentive to combine Ruza, Lyon and Daniels, the combination of Ruza, Lyon, Daniels and Buckingham is also an improper combination. Accordingly, we cannot sustain the examiner's rejection of dependent claims 17 and 18 under 35 U.S.C. § 103 as being unpatentable over Ruza in view of Lyon, Daniels and Buckingham.

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CONCLUSION

To summarize, the decision of the examiner to reject claims 1-15, 17 and 18 under 35 U.S.C. § 103 is reversed.

REVERSED

	CHARLES E. FRANKFORT)	
	Administrative Patent Judge)	
)	
)	
)	BOARD OF
PATENT)	
	JEFFREY V. NASE)	APPEALS AND
	Administrative Patent Judge)	
INTERFERENCES)	
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)	
	JENNIFER D. BAHR)	
	Administrative Patent Judge)	

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APPENDED CLAIM

1. Apparatus for lubricating and curling a rim of a paperboard container comprising:

a housing block defining a central recess sized and configured to accept therein a rim of a paperboard container to be curled;

an annular curling channel disposed in said recess for curling the rim of the paperboard container in response to relative advancing movement between the paperboard container and the housing block;

said housing block also defining an annular liquid channel concentrically disposed in surrounding relationship to said annular curling channel for distributing lubricating liquid; and

a porous liquid transfer ring formed of a felt or open-celled foam material, said liquid transfer ring being attached to said housing block in covering relationship to said annular liquid channel so that lubricating liquid supplied to said liquid channel comes into contact with and saturates said liquid transfer ring;

said liquid transfer ring includes a circular edge surface which defines a central opening such that said liquid transfer ring extends partially over said curling channel, wherein

the rim of the paperboard container comes into wiping contact with said central opening of said liquid transfer ring so that lubricating liquid is transferred thereto prior to the rim being curled in said curling channel.