

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(2) is not binding precedent of the Board.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. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DANIEL D. KEWIN

Appeal No. 2000-1492
Application No. 09/255,276

ON BRIEF

Before CALVERT, STAAB and McQUADE, *Administrative Patent Judges*.

STAAB, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's final rejection of claims 1-10, all the claims currently pending in the application.

Appellant's invention pertains to a tubular core assembly for a roll of paper (claims 1-5), and to an annular end member

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for insertion into an end portion of a hollow cylindrical core member (claims 6-10). An understanding of the invention can be acquired from a reading of representative claim 1, a copy of which is found in an appendix to appellant's main brief.

The references of record relied upon by the examiner in support of a rejection under 35 U.S.C. § 103 are:

Bushell et al. (Bushell) 1995	5,441,780	Aug. 15,
Kewin 1997	5,595,356	Jan. 21,

Claims 1-10 stand rejected under 35 U.S.C. § 103 as being unpatentable over "Kewin in view of Bushell et al or vice versa" (answer, page 3).

Reference is made to appellant's main and reply briefs (Paper Nos. 11 and 13), and to the examiner's answer (Paper No. 12) for the respective positions of appellant and the examiner regarding the merits of these rejections.

Kewin¹ pertains to a tubular core assembly for a roll of paper or other sheet material, and comprises a hollow cylindrical core member 12 and an annular end member 14 of metal or plastic material secured within each end of the core

¹This is appellant's own patent.

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member. Each end member includes radially projecting lugs 18, 20 that are received in notches 22, 24 in the core member to facilitate the transmission of torque and axial pressure from the end member to the core member (column 3, lines 55-57). In addition, the inner annular surface of the end member includes notches 26, 28, 30, 32, the purpose of which is to engage a key on a chuck (column 2, lines 1-16; column 4, lines 60-64). Accordingly, rotational movement of the chuck can be imparted to the end member and thence to the core member.

Bushell relates to a paper tube 3 having plastic end ring supports 7, 9. As can be seen from a review of the drawing figures, especially Figure 2, the paper tube and end rings are constructed such that the tube and end ring assembly has a uniform inside diameter and a uniform outside diameter. As explained at column 1, lines 21-27, heavy gauge tubes of this type may be used to wind yarn or cloth, or for holding heavy items such as carpeting. These heavy gauge tubes "are usually supported on mandrels so that the product can be loaded onto the tube or removed from the tube" (column 1, lines 27-30).

Looking at the examiner's § 103 rejection from the perspective of Kewin as the starting point of the rejection,

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the examiner concedes that Kewin does not disclose an end member

14 having an inner annular surface 36 at the lug end of the end member that is continuous and of constant radius around the circumference thereof, as called for in the appealed claims. Nevertheless, the examiner contends that it would have been obvious to make the inner annular surface of Kewin's end member continuous and of constant radius around the circumference thereof because

chucks having a continuous, constant radius outer circumferential surface which may or may not be expandable or mandrels having such surfaces are old and well known in the art, and to make the inner circumferential surface of the end members of Kewin conform to the shape of the chucks or mandrels used to support the core would have obviously followed especially in view of the teaching of Bushell et al. [Answer, page 3.]

Assuming for the sake of argument that expandable chucks having a continuous, constant radius outer circumferential surface are "old and well known in the art" as asserted by the examiner, it is not apparent to us why it would have "obviously followed" to provide the inner annular surface of Kewin's end member with a continuous, constant radius inner annular surface to "conform" to the shape of such old and well

known chucks. Certainly, nothing in Kewin would have suggested such a modification. Instead, Kewin suggests just the opposite, namely, that the inner annular surface of the end member should be provided with notches to make the end member compatible with a variety of different types of chucks (see column 1, lines 52-62). As to Bushell, we have carefully reviewed this reference and conclude that there is no teaching therein that would justify modifying the chuck receiving inner annular surface of Kewin in the manner proposed by the examiner. In this regard, while Bushell certainly discloses an end cap having a continuous, constant radius inner annular surface, Bushell provides no cogent reason for providing this feature in Kewin's end member. In this regard, Bushell's end member is not used in conjunction with a chuck² (i.e., a clamp member capable of transmitted torque), but rather in conjunction with a mandrel,³ which we understand as not

²The noun "chuck" denotes "[a] clamp that holds a tool or material being worked in a machine such as a lathe." *Webster's III New Riverside University Dictionary*, Riverside Publishing Company, copyright © 1984 by Houghton Mifflin Company.

³The noun "mandrel" denotes "[a] spindle or axle for securing or supporting material being machined." *Webster's*

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involving any clamping or torque transmitting function but instead merely a supporting function for allowing rotation of the end member and its associated core member. Given the shortcoming of Bushell, and the teachings of Kewin that the inner annular surface of the end member should be configured to receive a variety of different types of chucks, the examiner's position with respect to modifying Kewin based on the construction of conventional expandable chucks and/or the teachings of Bushell is not well founded.

As to utilizing Bushell as the starting point of the rejection, the examiner implicitly acknowledges that Bushell's end members do not have radially projecting lugs for cooperating with lug receiving notches in the core member, as called for in the appealed claims. The examiner contends, however, that it would have been obvious to provide the end members of Bushell with radially projecting lugs "to more securely connect the end members to the core member in view of the teachings of Kewin" (answer, page 3). Inasmuch as Kewin's radially projecting lugs are for the express purpose of

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facilitating transmission of torque and axial pressure from the end member to the core member (column 3, lines 55-57), incorporating radially projecting lugs into Bushell's end member would serve no useful purpose. This is so because Bushell's end members are designed to cooperate with a mandrel, which, as far as we can tell, is merely for the purpose of supporting the end and core members in a way that allows for rotation thereof, rather than for the purpose of positively transmitting torque and/or axial loads to the end member and thence to the core member.

In light of the foregoing, we shall not sustain the standing § 103 rejection of claims 1-10 as being unpatentable over Kewin and Bushell, each in view of the other.

The decision of the examiner is reversed.

REVERSED

IAN A. CALVERT)
Administrative Patent Judge)
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) BOARD OF PATENT

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LAWRENCE J. STAAB)	
Administrative Patent Judge)	APPEALS AND
)	
)	INTERFERENCES
)	
JOHN P. McQUADE)	
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LJS:hh

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