Paper No. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RALF NIEMEIER

Appeal No. 2001-2320
Application 09/097,295

ON BRIEF

Before FRANKFORT, MCQUADE, and NASE, Administrative Patent Judges.

MCQUADE, Administrative Patent Judge.

DECISION ON APPEAL

Ralf Niemeier appeals from the final rejection of claims 1 through 31, all of the claims pending in the application.

THE INVENTION

The invention relates to a method of producing a metal section having two limbs connected via a force-fitting joint. Representative claim 1 reads as follows:

1. A method of producing a metal section, including the steps of: making a groove in a first section limb by means of a microstruture-changing material deformation; positioning an abutting side of a second section limb in the groove situated on an inside portion of the first section limb; and then applying a

pressure at which a flow limit of material situated beneath the groove is exceeded, and causing material situated next to the groove of the first section limb to move toward at least one side face of the second section limb to such an extent that at least a force-fitting joint is achieved at substantially all contact locations.

THE PRIOR ART

The references relied on by the examiner to support the final rejection are:

Parsons et al. (Parsons)	930,413	Aug. 10, 1909
Steenstrup	1,498,892	Jun. 24, 1924
Palmer et al. (Palmer)	3,553,831	Jan. 12, 1971
Ito	4,133,091	Jan. 9, 1979

THE REJECTIONS

Claims 1 through 4, 14 through 17, 19 through 21, 24 through 26, 30 and 31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Parsons in view of either Palmer or Ito.

Claims 1 through 14 and 17 through 31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Steenstrup in view of either Palmer or Ito.

Attention is directed to the appellant's main and reply briefs (Paper Nos. 21 and 23) and to the examiner's final rejection and answer (Paper Nos. 9 and 22) for the respective positions of the appellant and the examiner with regard to the merits of these rejections.

DISCUSSION

The appellant's argument (see, for example, pages 8 and 9 in the main brief) that Parsons and Steenstrup, the examiner's primary references, are non-analogous art poses the threshold issue in this appeal. In an obviousness determination under 35 U.S.C. § 103, a reference which is non-analogous is too remote to be treated as prior art. In re Clay, 966 F.2d 656, 658-59, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992). There are two criteria for determining whether a reference is analogous: (1) whether the reference is from the field of the inventor's endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor's endeavor, whether it is reasonably pertinent to the particular problem with which the inventor was involved. Id.

Both Parsons and Steenstrup pertain to the manufacture of packing elements wherein packing strips or teeth are affixed to a base member.

The Parsons method comprises the steps of providing a metal base member having a plurality of grooves, inserting packing strips into the grooves, and securing the strips within the grooves by rolling the material adjacent the sides of the grooves into gripping engagement with the strips.

The Steenstrup method comprises the steps of cutting slots or grooves 16 in a strip of material 15, inserting metal packing strips 17 into the grooves, and securing the strips within the grooves by rolling the material adjacent the sides of the grooves such that the material between slots is crushed into squeezing engagement with the strips.

The specification in the instant application indicates that the field of the appellant's endeavor is "a method of producing a metal section as used, for example, in the construction industry, in window construction, in the construction of vehicles or machines or similar application areas" (page 1). The specification also indicates that one of the particular problems with which the appellant was involved was "to provide a cost-effective method of producing metal sections which as a priority permits . . . reliable joining of the section limbs" (page 3). Parsons and Steenstrup fall squarely within this field of endeavor and are reasonably pertinent to this problem. Hence, both references constitute analogous art which was properly considered by the examiner in assessing the obviousness of the invention set forth in the appealed claims.

As for the application of these references against the appealed claims, the examiner has determined (see pages 2 through

4 in the final rejection) that each of Parsons and Steenstrup responds to all of the limitations in independent claim 1 except for the one requiring the groove in the first section limb to be made by means of a microstructure-changing material deformation. In this regard, Parsons does not indicate how the grooves are made in its first section limb (the metal base member), and Steenstrup discloses that the grooves or slots 16 in its first metal limb (strip of material 15) are made by cutting. Similarly, the examiner has determined that each of Parsons and Steenstrup responds to all of the limitations in independent claims 26 and 30 except for the one in claim 26 requiring the groove in the first section limb to be made by means of a microstructure-changing, non-cutting material deformation and the one in claim 30 requiring the groove in the first section limb to be made by means of a ram-striking process.

The appellant's contention (see, for example, pages 7 and 9 in the main brief and page 2 in the reply brief) that Parsons and Steenstrup also lack response to the limitations in claims 1, 26 and 30 requiring the flow limit of the first section limb material to be exceeded is not well taken. The examiner's

finding (see pages 2 and 4 in the final rejection and pages 5 through 7 in the answer) that the material flow limit inherently is exceeded during the strip securing steps disclosed by these references, wherein material is rolled into gripping or squeezing engagement with the strips, is reasonable on its face and has not been cogently disputed by the appellant.

Palmer and Ito are similar to Parsons and Steenstrup in that they too pertain to the manufacture of composite structures wherein members are inserted into grooves on a base member and secured thereto by deforming the base member material adjacent the sides of the grooves into gripping engagement therewith. Of particular interest is the manner in which the grooves are formed in the base members. In Palmer, the grooves are made by passing the base member (metal strip 10) between a bottom roller 17 having a flat annular supporting surface and constraining side flange portions 19 and 20, and a top roller 21 having a plurality of laterally spaced annular ribs 22 which press into and deform the base member to produce the grooves. In Ito, the grooves are made by placing the base member (shell 10) on a die 9 and deforming it from above with a ram-powered punch 11 to produce a slot or groove 13.

In proposing to modify the methods respectively disclosed by Parsons and Steenstrup so as to arrive at the invention set forth in claims 1, 26 and 30, the examiner concludes (see pages 3 and 5 in the final rejection) that it would have been obvious to implement the groove forming steps in these methods by means of a microstructure-changing, non-cutting material deformation carried out by a roller as taught by Palmer or a striking ram as taught by Ito.

The appellant attacks these conclusions on the grounds that neither Palmer nor Ito teaches or suggests the use of a microstructure-changing, non-cutting material deformation or a ram-striking process to form a groove, and that the applied references do not contemplate the problems addressed by the claimed invention or offer any suggestion or motivation which would have led one of ordinary skill in the art to combine them in the manner proposed. None of these arguments is persuasive.

To begin with, the examiner's finding (see pages 3 and 5 in the final rejection and pages 3 through 5 in the answer) that both Palmer and Ito employ microstructure-changing, non-cutting material deformations to form grooves is reasonable on its face given the nature of the material deformation or flow which necessarily occurs when the grooves are formed. The appellant

has not advanced any showing or technical reasoning contradicting the examiner's position here. Furthermore, Ito clearly accomplishes the groove forming step via a ram-striking process employing ram-mounted punch 11. The motivation or suggestion to use material deformations as in Palmer or Ito to carry out Parson's unspecified groove forming step and to replace Steenstrup's groove cutting step stems from the advantages of same which would have been self-evident to the artisan, e.g., that such material deformation steps would eliminate the unnecessary waste of material attendant a groove cutting step. As for the failure of the applied references to recognize and/or address the specific problems purportedly solved by the claimed invention (see pages 10 through 12 in the main brief), it is first noted that independent claims 1, 26 and 30 are not limited to methods specific to such problems. Moreover, the law does not require that references be combined for the reasons contemplated by the inventor as long as some motivation or suggestion to combine them is provided, as is the case here, by the prior art taken as a whole. In re Beattie, 974 F.2d 1309, 1312, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992).

Finally, the appellant (see pages 12 through 14 in the main brief and page 4 in the reply brief) submits that commercial

success and superior results allegedly enjoyed by the claimed invention constitute secondary indicators of non-obviousness.

The record, however, does not contain any evidence supporting the assertions of commercial success and superior results. The argument of counsel in a brief cannot take the place of evidence. In re Pearson, 494 F.2d 1399, 1405, 181 USPQ 641, 646 (CCPA 1974).

In light of the foregoing, the appellant's position on appeal that the differences between the subject matter recited in independent claims 1, 26 and 30 and the prior art are such that the subject matter as a whole would not have been obvious at the time the invention was made to a person having ordinary skill in the art is not persuasive.

Accordingly, we shall sustain the standing 35 U.S.C. § 103(a) rejection of claims 1, 26 and 30 as being unpatentable over Parsons in view of either Palmer or Ito and the standing 35 U.S.C. § 103(a) rejection of claims 1, 26 and 30 as being unpatentable over Steenstrup in view of either Palmer or Ito.

We also shall sustain the standing 35 U.S.C. § 103(a) rejection of dependent claims 2 through 4, 14 through 17, 19 through 21, 24, 25 and 31 as being unpatentable over Parsons in

view of either Palmer or Ito and the standing 35 U.S.C. § 103(a) rejection of dependent claims 2 through 14 and 17 through 25, 27 through 29 and 31 as being unpatentable over Steenstrup in view of either Palmer or Ito. The appellant has not challenged these rejections with any reasonable specificity, thereby allowing the dependent claims to stand or fall with their respective independent parent claims. See In re Nielson, 816 F.2d 1567, 1572, 2 USPQ2d 1525, 1528 (Fed. Cir. 1987).

SUMMARY

The decision of the examiner to reject claims 1 through 31 is affirmed.

AFFIRMED

CHARLES E. FRANKFORT Administrative Patent Judge	)	
	)	BOARD OF PATENT
	)	APPEALS AND
JOHN P. MCQUADE Administrative Patent Judge	)	INTERFERENCES

)
JEFFREY V. NASE)
Administrative Patent Judge)

JPM/kis
ROBERT E. MUIR
HUSCH & EPPENBERGER
101 SW ADAMS STREET
SUITE 800
PEORIA, IL 61602