

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte MARJORIE S. BURGESS

Appeal No. 2002-1080
Application No. 09/372,149

HEARD: FEBRUARY 13, 2003

Before COHEN, STAAB, and NASE, Administrative Patent Judges.
STAAB, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-23, which are all of the claims pending in this application.

We AFFIRM-IN-PART.

BACKGROUND

Appellant's invention pertains to a foot protector that is lightweight, flexible, inexpensive and readily disposable. The appealed claims are directed to a foot protector (claims 1-16 and 21-23), a method of protecting a sole of a foot (claims 17

and 18), and a saleable package including at least two foot protectors (claims 19 and 20). A further understanding of the invention can be derived from a reading of the appealed claims, which are reproduced in the appendix to appellant's main brief.

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

Reed	2,677,906	May 11, 1954
Crane	2,747,301	May 29, 1956
McCarthy	2,985,970	May 30, 1961
Guarrera	3,693,269	Sep. 26, 1972
Greco	4,644,669	Feb. 24, 1987
Kenji et al (Kenji)	5,799,415	Sep. 1, 1998

The following rejections under 35 U.S.C. § 103(a) are before us for review:

(1) claims 1-4, 8-12 and 16-23, rejected as being unpatentable over McCarthy in view of Guarrera;

(2) claims 5 and 13, rejected as being unpatentable over McCarthy in view of Guarrera, and further in view of Crane;

(3) claims 6 and 14, rejected as being unpatentable over McCarthy in view of Guarrera, and further in view of either Kenji or Reed; and

(4) claims 7 and 15, rejected as being unpatentable over McCarthy in view of Guarrera, and further in view of Greco.

Reference is made to appellant's main and reply briefs (Paper Nos. 14 and 17) and to the examiner's answer (Paper No. 15) for the respective positions of appellant and the examiner regarding the merits of these rejections.

DISCUSSION

Claims 1, 8, and 19

McCarthy, the primary reference in each of the examiner's rejections, is directed to a lightweight shoe that is adapted to be secured to the foot without any straps, laces, or other additional fastening elements, such as uppers which exert pressure on the upper part of the foot (column 1, lines 15-21). To this end, McCarthy utilizes "a conventional complete shoe bottom, comprising an outer wearing surface and an inner smooth foot supporting surface, with a layer of pressure sensitive adhesive, on the inner smooth foot-supporting surface to adhere the shoe bottom to the foot" (column 2, lines 5-10). McCarthy indicates that the shoe bottom 10 may be made of rubber (column 2, line 14). McCarthy also indicates that the lightweight shoe may be made from simple sheet material that is disposable as desired (column 4, lines 5-7).

The examiner's position to the effect that McCarthy meets all the limitations of claim 1 except for the requirements that the cushion member is of substantially uniform thickness and does not have a thickened heel portion is well founded. In this regard, McCarthy's sole 10 is a "cushion member" within the broad meaning of that term. In proceedings before it, the PTO applies to the verbiage of claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in appellant's specification. *In re Morris*, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027

(Fed. Cir. 1997). *See also, In re Sneed*, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983). Here, appellant's specification indicates that foot protector 100 "has enough resilience, or cushion effect, to provide comfort to the foot of the wearer" (page 4, lines 8-9). Consistent with this disclosure, and in keeping with the circumstance that the word "cushion" may mean "something resilient used as a rest, support, or shock absorber,"¹ we conclude that the term "cushion member" as used in appellant's claims encompasses a rubber sole that supports a user's foot such as the sole 10 of McCarthy.

As to the claim requirements that the cushion member is of substantially uniform thickness and does not have a thickened heel portion, the examiner's conclusion that Guarrera would have suggested providing McCarthy with a sole member of such configuration, thereby arriving at the subject matter recited in claim 1, is well founded. Guarrera is directed to a "do-it-yourself" repair unit for footwear. Figures 1 and 3 of Guarrera teach that the repair unit 24 may comprise a one piece outsole 18 having an integrated heel portion 28 of increased thickness relative to the forward portion 26 of the outsole to provide a distinct heel. On the other hand, Figures 7 and 8 of Guarrera teach that the repair unit 90 may comprise a one piece outsole of uniform thickness with a flat ground contacting surface and no distinct heel portion. Thus,

¹*Webster's II New Riverside University Dictionary*, Riverside Publishing Company, copyright © 1984 by Houghton Mifflin Company.

Guarrera may be viewed as broadly teaching that an outsole may be configured either with a separate and distinct integrated heel portion or, in the alternative, a flat ground contacting surface and no distinct heel portion. Notwithstanding appellant's argument to the contrary, we believe the above noted teachings of Guarrera would have suggested to one of ordinary skill in the art that McCarthy's lightweight shoe invention comprising a shoe bottom adhered to the bottom of the foot may be made by utilizing an alternative shoe bottom construction where the shoe bottom does not incorporate an integrated thickened heel portion but instead comprises an outsole of uniform thickness with a flat ground contacting surface and no distinct heel portion. Our view in this regard is bolstered by McCarthy's teaching, noted above, that the footwear thereof may be made from a simple sheet of material that is disposable as desired (column 4, lines 5-7).

Appellant's argument that Figures 7 and 8 of Guarrera cannot be fairly said to teach or suggest footwear without a thickened heel portion is unconvincing. To begin with, appellant has not taken into account that the element 10 of McCarthy's lightweight shoe invention may comprise a conventional complete *shoe bottom* (column 2, lines 5-6). When the combined teachings of McCarthy and Guarrera are considered as a whole, it is our view that one of ordinary skill in the art would consider the shoe bottom 10 of McCarthy, the outer, or wear, sole layer 18 of Figure 1 of Guarrera and its replacement member 24, and the outer layer 88 of Figure 7 of Guarrera and its

replacement member 90 as corresponding to one another. In addition, while it is certainly true that Guarrera's Figures 7-8 "wedgee" type shoe embodiment includes built up heel portion 84 upon which the foot rests, appellant's emphasis of this circumstance misses the point that the built up heel is simply the result of the particular construction for midsole layer 80 required to give the Figure 7 shoe its distinctive "wedgee" appearance.

The test for obviousness is what the combined teachings of the references would have suggested to those of ordinary skill in the art. *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). Moreover, in considering the prior art, one skilled in the art is not compelled to blindly adopt every aspect of the prior art teachings without the exercise of independent judgement. *See Lear Siegler, Inc. v. Aeroquip Corp.*, 733 F.2d 881, 889, 221 USPQ 1025, 1032 (Fed. Cir. 1984). In the present case, Guarrera constitutes evidence of the conventional use of a uniform thickness outsole that includes a flat ground contacting surface that does not have a distinct heel portion (Figures 7 and 8) as an alternative to an outsole having a distinct thickened heel portion (Figures 1 and 3), and justifies the examiner's conclusion of obviousness with respect to the subject matter of claim 1. In this regard, the artisan would have readily appreciated the uniform thickness flat bottom outsole construction disclosed by Guarrera in Figures 7 and 8 as an art-recognized alternative to the construction disclosed by McCarthy.

We shall therefore sustain the standing rejection of claim 1 as being unpatentable over the applied prior art. We shall also sustain the standing rejection of claims 8 and 19 since appellant states (main brief, page 6) that claims 1, 8, and 19 stand or fall as a group.

Claim 2

Claim 2 depends from claim 1 and adds that the thickness of the cushion member is in a range of about 1 mm to about 5 mm.

In rejecting this claim, the examiner asserts (answer, page 7), and appellant does not expressly dispute,² that it is known in the art of shoe making that the outsole may vary in thickness from 1 mm to 10 mm. The examiner further asserts (answer, page 8) that it is known in the art that the thickness of the various layers of the sole may be varied to bring about certain desired results (e.g., wear resistance, impact resistance). In addition, appellant states on page 5 of the reply brief that “a thinner replacement member 90 [of Guarrera] would wear out more quickly than a thicker replacement member 90” and that “one of ordinary skill in the art would have sought to strike a balance between the replacement member 90 being too thin and wearing out too quickly on one hand, and being too thick and thus unsightly, for example, on the other hand.”

²Appellant’s statement on page 4 of the reply brief that “[t]he Examiner asserts, without support, that it is well known that an outsole can be a thin layer in a range from 1 mm to 10 mm” does not expressly dispute the examiner’s assertion.

Turning to McCarthy, although the reference does not disclose any particular thickness for the “conventional complete shoe bottom” (column 2, lines 5-6) utilized in the practice of the invention thereof, it is apparent that the shoe bottom must have a thickness suitable for its intended purpose of providing an article of footwear that may be worn for periods of time and for activities akin to those of conventional footwear (column 3, lines 37-41). In the present case, we believe one of ordinary skill in the art would have appreciated that the conventional shoe bottom 10 of McCarthy may have a thickness of “about 5 mm” (i.e., about 0.20 inch) in order to strike a balance between lightness and wear resistance. We therefore conclude that the subject matter of claim 2 would have been obvious to one of ordinary skill in the art. In this regard, it is well established that one value within a claimed range fully meets that range. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 783, 227 USPQ 773, 779 (Fed. Cir. 1985).

Claim 3

We reach an opposite conclusion with respect to claim 3, which depends from claim 1 and adds that the thickness of the cushion member is about 2 mm.

Simply put, we do not believe that the reference evidence adduced by the examiner establishes that one of ordinary skill in the art would have understood that the conventional shoe bottom 10 of McCarthy would have a thickness as thin as “about 2 mm” (i.e., about 0.08 inch). We therefore shall not sustain the standing rejection of claim 3.

Claim 4

Claim 4 depends from claim 1 and adds that the cushion member is formed from a plurality of layers.

Looking at McCarthy, the cushion member thereof may be regarded as comprising sole member 10 in combination with adhesive device 20. Since this combination of elements “is formed from a plurality of layers,” claim 4 does not patentably distinguish over McCarthy as modified by Guarrera. Hence, we shall sustain the standing rejection of claim 4.

Claim 5

Claim 5 depends from claim 4 and adds that the plurality of layers includes a layer of randomly oriented fibers. In rejecting this claim, the examiner relies on Crane for its showing of a slipper made of molded pulp fibers. As we understand it, it is the examiner’s position that it would have been further obvious to make the sole member of McCarthy out of pulp fibers “to provide a rough top surface to better adhere the tacky layer to the sole and better adhere the sole to the foot” (answer, page 5).

Like appellant, we see no basis in the applied references for any such modification of McCarthy and consider that the examiner has engaged in a hindsight reconstruction of appellant’s claimed foot protector by impermissibly utilizing appellant’s own disclosure and claims as a target to be hit by invention-guided manipulation of the applied reference teachings. In this regard, it is not apparent to us where the applied

prior art teaches that pulp fibers would provide the advantages attributed thereto by the examiner. As our court of review indicated in *In re Fritch*, 972 F.2d 1260, 1266 n.15, 23 USPQ2d 1780, 1783-84 n.15 (Fed. Cir. 1992), it is impermissible to use the claimed invention as an instruction manual or “template” in attempting to piece together isolated disclosures and teachings of the prior art so that the claimed invention is rendered obvious, as the examiner appears to have done here.

In light of the foregoing, we shall not sustain the standing rejection of claim 5.

Claim 6

Claim 6 depends from claim 4 and adds that the plurality of layers includes a corrugated layer. In rejecting claim 6, the examiner cites Kenji or Reed as examples of footwear having corrugated insole layers. The examiner concludes that it would have been obvious to one of ordinary skill to provide a corrugated insole layer in McCarthy in order to gain the advantages taught by the tertiary references.

The examiner’s position is well taken. Kenji teaches (column 2, lines 20-28) that a corrugated layer may be added between the foot and the sole of the footwear to provide ventilation, and Reed teaches (column 2, lines 11-20) that a corrugated layer may be added between the foot and the sole of the footwear to improve cushioning of the foot. The provision of a corrugated layer in McCarthy to achieve either one of the benefits would have been obvious.

Appellant's argument (main brief, page 16) that ventilation is not needed in McCarthy because McCarthy's footwear has no upper is not persuasive because moisture trapped at the interface between the foot and the sole member still may a matter of concern in McCarthy. With respect to appellant's argument (main brief, page 16) that the provision of a corrugated layer in McCarthy would likely result in instability, we are appraised of no persuasive evidence of record to support appellant's contention. It is well settled that an attorney's argument in the brief cannot take the place of evidence and that arguments of counsel, unsupported by competent factual evidence of record, are entitled to little weight. See *In re Payne*, 606 F.2d 303, 315, 203 USPQ 245, 256 (CCPA 1979) and *In re Pearson*, 494 F.2d 1399, 1402, 181 USPQ 641, 644 (CCPA 1974).

In light of the above, the standing rejection of claim 6 shall be sustained.

Claim 7

Claim 7 depends from claim 4 and adds that the plurality of layers are quilted together at quilting portions, the quilting portions occupying an area much smaller than a total area of the foot protector. In rejecting this claim, the examiner cites Greco for its teachings of quilted insole layer 12.

Greco is directed to a toeless slipper having a sole 10 and optionally a soft insole 12 of quilted, padded material, attached to the sole 10 for providing cushioning and thermal insulation (column 2, lines 30-34). Consistent with Greco's disclosure that

insole 12 comprises a quilted, padded material, and with the commonly accepted meaning of the term “quilt,”³ we find that Greco’s insole 12 comprises a plurality of layers of material that are firmly stitched together, with the stitching occupying only a small portion of the total area of the insole. We consider that the addition of a quilted layer such as that disclosed by Greco into the footwear of McCarthy would have been obvious to one of ordinary skill in the art in order to gain the benefit of additional cushioning taught by Greco. The modified McCarthy shoe would respond to the requirement of claim 4 in that the resulting footwear would include a plurality of layers (i.e., the stitched together layers of the quilted insole). In addition, the modified McCarthy shoe would also respond to the requirement of claim 7 since the insole would comprise a plurality of layers “quilted” together with the quilting occupying only a smaller area of the total area of the footwear.

For these reasons, we shall sustain the rejection of claim 7.

Claims 9-16 and 20

Independent claim 9 is directed to a foot protector comprising a cushion member “that easily conforms to a bottom surface of a wearer’s foot.” In rejecting claim 9, the

³*Webster’s II New Riverside University Dictionary*, Riverside Publishing Company, copyright © 1984 by Houghton Mifflin Company indicates that the noun “quilt” may mean “1. A bed covering consisting of two layers of fabric with a layer of batting or feathers between and stitched firmly together, usu. in a decorative pattern,” and that the verb “quilt” may mean “1. To make into a quilt by stitching together (layers of fabric).”

examiner contends (answer, page 3) that McCarthy's footwear responds to this claim requirement when given its broadest reasonable interpretation because the sole follows the contour of the user's foot when looked at from above the foot.

While it is true that terms in a claim are to be given their broadest reasonable interpretation in proceedings before the PTO, this interpretation must be consistent with the specification and the claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art. See *Sneed*, 710 F.2d at 1548, 218 USPQ at 388. Given appellant's disclosure at page 4, lines 19-26, that the foot protector conforms to the three-dimensional contours of the sole of the foot as shown in appellant's Figure 2, the examiner's interpretation of the claim terminology "easily conforms to a bottom surface of a wearer's foot" is simply not reasonable. This is especially so given appellant's comments in the reply brief, page 12, penultimate paragraph, concerning the intended meaning of the claim terminology. In short, we can think of no circumstances under which the artisan, consistent with the appellant's specification, would construe the "easily conforms to a bottom surface of a wearer's foot" terminology in the manner asserted by the examiner. This being the case, we shall not sustain the standing rejection of claim 9 as being unpatentable over McCarthy in view of Guarrera.⁴

⁴In the event of further prosecution, the examiner should consider whether adhesive device 20 of McCarthy, which comprises a cloth layer coated with adhesive
(continued...)

We likewise shall not sustain the standing rejection of claims 10-12, 16 and 20 as being unpatentable over McCarthy in view of Guarrera since these claims either depend from or otherwise include all the limitations of claim 9.

As to claims 13-15, the Crane reference additionally applied in the rejection of claim 13, the Kenji and Reed references additionally applied in the rejection of claim 14, and the Greco reference additionally applied in the rejection of claim 15 do not cure the deficiencies of McCarthy noted above. Hence, the rejection of these claims also shall not be sustained.

Claims 17 and 18

Claim 17 is directed to a method of providing a foot protector like that of claim 1 and includes the step of applying the cushion member to a user's foot such that the tack adhesive layer contacts the sole of the foot. Our reasoning as set forth in our treatment of claim 1 *supra* applies. We shall sustain the rejection of claim 17 since in

⁴(...continued)
layers 24 and 25, renders any of appellant's claims unpatentable. In this regard, it is noted that appellant's sheet member 110 may be formed of cloth fibers (specification, page 5, lines 13-16).

normal usage of the modified McCarthy device one would inherently perform the steps recited in the claim. *In re King*, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986).

Claim 18 depends from claim 17 and adds that the step of applying the cushion member also conforms the cushion member to the specific curvature of the sole of the foot. For the reasons discussed in our treatment of claim 9 *supra*, we shall not sustain this rejection.

Claim 21

Claim 21 is directed to a foot protector comprising a cushion member of substantially uniform thickness, and a “low tack” adhesive layer provided on at least a portion of the foot-contact surface of the cushion member. Appellant argues (main brief, page 21) that claim 21 patentably distinguishes over the applied references because the “unusually strong” adhesive of McCarthy (column 3, line 18) used to hold the sole to the bottom of the foot is the antithesis of the “low tack” adhesive recited in the claim.

The term “low” used to describe appellant’s tack adhesive is a word of degree. When words of degree are used in a claim, our reviewing court has directed us to look to the underlying specification to determine if it contains “some standard for measuring that degree,” that is, to see if the specification contains some guidelines by which one of ordinary skill in the art would understand the scope or metes and bounds of the

claimed subject matter when read in light thereof. *Seattle Box Co. v. Industrial Crating & Packing, Inc.*, 731 F.2d 818, 826, 221 USPQ 568, 573-74 (Fed. Cir. 1984).

Appellant's specification (paragraph spanning pages 3 and 4) informs the artisan that the tack adhesive layer "may include any tack adhesive for temporarily attaching the resilient sheet member 110 to the sole of the foot 200," that adhesives used, for example, "in BAND-AIDS™, POST-IT NOTES™, feminine pads, and the like may be used as the tack adhesive layer 120," and that preferably the tack adhesive used in the tack adhesive layer 120 "is sticky enough to reliably hold the foot protector 100 against the foot 200, but is not so sticky that it causes difficulty or discomfort in removing the foot protector 100 from the sole of the foot 200." From our perspective, one versed in the art, consistent with these guidelines, would understand the term "low tack adhesive" to cover a range of adhesives, including both relatively weak adhesives like those used in POST-IT NOTES™ and relatively stronger adhesives like those used in BAND-AIDS™, so long as the adhesive is strong enough to reliably hold the foot protector to the sole of the foot, yet not so strong as to cause difficulty in removing the foot protector.

In our view, the "relatively strong" adhesive 92 (column 3, lines 5-6) used by McCarthy to hold sheet member 90, and thus shoe bottom 10, to the foot qualifies as a "low tack" adhesive within the meaning of that term as used in appellant's claim. In arriving at this conclusion, we note that (1) the adhesives of McCarthy are preferably

“standard surgical tape adhesives” (column 3, lines 12-14), (2) the adhesive 92 of McCarthy “must not be so very tenacious that it will remove skin when it is stripped from the foot” (column 3, lines 22-23), (3) “ready strippability is essential” for McCarthy’s adhesives (column 3, lines 30-31), and (4) upon removal of the shoe, the adhesive 92 “strips cleanly from the foot” (column 3, lines 42-43). Based on these disclosures, we conclude that the adhesive 92 of McCarthy is akin to adhesives of the type used in BAND-AIDS™, and that one skilled in the art would consider adhesive 92 as being within the range of adhesives covered by claim 21.

In light of the above, we shall sustain the standing rejection of claim 21.

Claims 22 and 23

Claim 22 is directed to a foot protector comprising a resilient sheet member of substantially uniform thickness in a range of about 1mm to about 5mm, and a tack adhesive layer provided on at least a portion of the foot-contact surface of the resilient sheet. Appellant argues (main brief, page 23) that the thickness range limitation patentably distinguishes claim 22 over the applied references; however, for the reasons

discussed *supra* in our treatment of claim 2, we do not agree. Thus, we shall sustain the standing rejection of claim 22.

Claim 23 depends from claim 22 and adds that the thickness of the resilient sheet member is about 2mm. In this instance, our discussion *supra* in our treatment of claim 3 applies. For the reasons explained in that discussion, we shall not sustain the rejection of claim 23.

CONCLUSION

The rejection of claims 1-23 is affirmed as to claims 1, 2, 4, 6-8, 17, 19, 21 and 22, but is reversed as to claims 3, 5, 9-16, 18, 20 and 23.

The decision of the examiner is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

IRWIN CHARLES COHEN)	
Administrative Patent Judge)	
)	
)	
)	
)	
)	BOARD OF PATENT
LAWRENCE J. STAAB)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
)	
JEFFREY V. NASE)	
Administrative Patent Judge)	

OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA , VA 22320