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. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte SUG KYN KANG and MOO YOUNG LEE

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Appeal No. 2004-0107
Application No. 09/963,122

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ON BRIEF

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Before ABRAMS, STAAB, and BAHR, Administrative Patent Judges.

ABRAMS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 13-23, which are all of the claims pending in this application.

We REVERSE.

## BACKGROUND

The appellants' invention relates to a soccer shoe. An understanding of the invention can be derived from a reading of exemplary claim 13, which has been reproduced below.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

| | | |
|---|---|---|
| Nyhagen | 1,537,778 | May 12, 1925 |
| Dreschler | 1,577,791 | Mar. 23, 1926 |
| Diaz | 5,694,703 | Dec. 9, 1997 |

The admitted prior art as set forth on page 3, lines 6-12, of the appellants' specification (APA).

Claims 13-23 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the appellants regard as the invention.

The following rejections stand under 35 U.S.C. § 103(a):

(1) Claims 13, 14 and 16-18 on the basis of APA in view of Dreschler.

(2) Claim 15 on the basis of APA in view of Dreschler and Nyhagen.

(3) Claim 19 on the basis of APA in view of Dreschler and Nyhagen.

(4) Claims 20-22 on the basis of APA in view of Dreschler, Nyhagen and Diaz.

(5) Claim 23 on the basis of APA in view of Dreschler, Nyhagen and Diaz.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the Answer

(Paper No. 18) for the examiner's complete reasoning in support of the rejections, and to the Brief (Paper No. 17) and Reply Brief (Paper No. 19) for the appellants' 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. As a consequence of our review, we make the determinations which follow.

The appellants' invention relates to improvements in soccer shoes which, according to the appellants, allow a user to kick the ball farther, lessen the pain in the user's feet due to the impact of kicking the ball, and allow the shoe to retain its shape after kicking the ball and after being used for a long time. The invention is recited in claim 13 in the following manner:

> In a soccer shoe having a sole member, and an upper fixed to the sole member to surround the heel, medial side, lateral side, forepart, and instep of the foot of a user, said upper comprising:
>
> a flexible outer coat thin enough to be used for an ordinary soccer shoe;
>
> a thin rubber layer laid adhering to the inside of said outer coat;
>
> a sponge layer laid adhering to the inside of said rubber layer; and

> an inner coat laid adhering to the inside of said sponge layer, said inner coat being made of a cloth, wherein said rubber layer is thin enough not to dull the user's foot touch to a soccer ball while providing an elasticity both to contribute to a repulsive force applied to the soccer ball when colliding with said soccer shoe and to alleviate the pain of the foot caused by kicking said ball.

*The Rejection Under The Second Paragraph Of Section 112*

On pages 4 and 5 of the Answer, the examiner has taken issue with the following descriptive terminology, for the reasons here stated, concluding therefrom that the claims are indefinite:

> (1) In claims 13 and 19 "thin enough to be used" and "ordinary soccer shoe" are not clear as what is meant to be encompassed, and the metes and bounds of the claim cannot be determined.
>
> (2) In claims 13 and 19 the meaning is not clear of the phrase "thin enough not to dull the user's foot touch to a soccer ball while providing an elasticity both to contribute . . ." in that this could vary with different users.
>
> (3) In claims 13 and 19 it is not clear what is meant by "providing an elasticity."
>
> (4) In claim 20 it is not clear what is meant to be encompassed by "sufficiently thin" or what this phrase means, and it is not clear what is meant by the limitations recited in the last six lines of the claim.

The second paragraph of 35 U.S.C. § 112 requires claims to set out and circumscribe a particular area with a reasonable degree of precision and particularity. In re Johnson, 558 F.2d 1008, 1015, 194 USPQ 187, 193 (CCPA 1977). In making this determination, the definiteness of the language employed in the claims must be analyzed, not in a vacuum, but always in light of the teachings of the prior art and of the

particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art. Id. Applying the guidance of our reviewing court leads us to conclude that none of the phrases in issue is indefinite, and this rejection should not be sustained. Our reasoning follows.

In claims 13, 19 and 20, the outer coat (flexible upper) of the shoe is recited as being “thin enough” to be used in a soccer shoe. The meaning of this limitation would, in our view, readily be determinable by one skilled in the art, who would be expected to know whether an outside coat is too thick or too thin to be suitable for ordinary soccer play. We reach the same conclusion, for the same reason, with regard to the limitations in claims 13, 19 and 20 that the rubber layer be “thin enough not to dull” the user’s foot to a soccer ball and “providing an elasticity” to contribute to a repulsive force and to alleviate pain in the foot caused by kicking, inasmuch as these also are factors with which the artisan can be expected to have a great deal of expertise. The same is true of the limitation in claim 20 that the rubber layer is “sufficiently thick” to minimize pain to the foot caused by kicking a soccer ball. Further in this regard, we point out that the appellants have set out on pages 5, 7 and 10 of the specification the thickness of the rubber layer that will meet these limitations, and have recited it in claims 14 and 22. Thus, in addition to the knowledge that should be attributed to one of ordinary skill in the art of soccer shoes, the specification provides guidance to the artisan that will accomplish the stated goals.

The rejection under 35 U.S.C. § 112, second paragraph, is not sustained.

*The Rejections Under Section 103*

The test for obviousness is what the combined teachings of the prior art would have suggested to one of ordinary skill in the art. See, for example, In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In establishing a prima facie case of obviousness, it is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the appellant's disclosure. See, for example, Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1052, 5 USPQ2d 1434, 1439 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988).

Looking first to independent claim 13, the examiner finds all of the subject matter recited in the claim to be disclosed by the appellants in the admitted prior art (APA) set forth on page 3 of the specification, except for the "thin rubber layer laid adhering to the inside of said outer coat." However, it is the examiner's position that it would have been obvious to one of ordinary skill in the art to add such a layer to the soccer shoe described in the APA in view of the teachings of Dreschler "to aid in waterproofing the shoe so it can be used in inclement weather and protecting the user's foot from sudden

impacts, as would occur in adding any layer to those already present." See Answer, page 6. The appellants argue there is no suggestion to combine the references in the manner proposed by the examiner, in view of the limitation that the rubber layer also must be thin enough to provide better elasticity to improve the kicking action of the shoe and the lack of any teaching that waterproofing the shoe would result in such an improvement (Brief, page 9).

Dreschler discloses a waterproof shoe comprising a leather outer layer 1, to the inside of which is cemented a rubber layer 2. Dreschler explains that this construction provides the appearance of an ordinary shoe or boot, but has the added advantage of making the shoe waterproof without the necessity to treat the outer surface. As we understand the examiner's position, it is that (1) one of ordinary skill in the art would have found suggestion in Dreschler to make a soccer shoe waterproof by adding a rubber layer adhered to the inside of the outer coat, (2) the addition of a waterproofing rubber layer inherently would provide such elasticity to contribute to repulsive force of the shoe against the ball, and (3) the addition of a waterproofing layer also inherently would provide an elasticity that would alleviate the pain of the foot caused by kicking the soccer ball (Answer, pages 13-15). In our opinion, none of these conclusions is supported by evidence.

To conclude that a soccer shoe would be improved by adding a waterproof layer is merely conjecture on the part of the examiner. There is no suggestion to this effect in

either of the applied references, nor has the examiner proffered any evidence from other sources to support his assertion. Furthermore, even considering, arguendo, that it would have been obvious to add a rubber layer to the APA soccer shoe to make it waterproof, there is no basis in the record for concluding that such a rubber layer inherently would meet the other limitations of the claim regarding touch, repulsive force, and protection from pain so as to balance touch and elasticity to achieve specific goals, especially when considering that the factors are not recognized in the applied references.

It therefore is our opinion that the combined teachings of APA and Dreschler fail to establish a prima facie case of obviousness with regard to the subject matter of claim 13, and we will not sustain the Section 103 rejection of claim 13 or, it follows, of claims 14 and 16-18, which depend therefrom.

Claim 15, which depends from claim 13, stands rejected as being unpatentable over APA in view of Dreschler and Nyhagen, the latter being cited for teaching providing perforations in rubber overshoes to “allow for the air trapped between the shoe and the cover member to escape so the cover member can better adapt to the size and shape of the shoe” (Answer, page 7). We first point out that there is no such teaching in Nyhagen. However, be that as it may, consideration of the teachings of Nyhagen fails to alleviate the shortcomings discussed above in combining APA and Dreschler, and we will not sustain this rejection.

Independent claim 19 contains all of the limitations of claim 13, except that a sponge layer is adhered to the inner surface of the outer coat and the rubber layer is adhered to the inside of the sponge layer, which is the reverse of that which is recited in claim 13. Claim 19 stands rejected on the basis of APA, Dreschler and Nyhagen. As was the case with claim 15, Nyhagen fails to overcome the problems in combining APA and Dreschler to meet the basic requirements of the claim, that is, adding a rubber layer having specific characteristics to a soccer shoe, and thus a prima facie case of obviousness against claim 19 has not been established by these three references. This rejection is not sustained.

Independent claim 20 and dependent claims 21 and 22 have been rejected on the basis of APA in view of Dreschler, Nyhagen and Diaz. Claim 20 recites the same limitations as claims 13 and 19 regarding the structure of the shoe, except that it does not specify whether the rubber layer or the sponge layer is adhered to the outer coat, and it adds a sole member having cleats. Diaz was cited for teaching that it is desirable under some circumstances to provide cleats to increase the traction of the sole of a shoe (Answer, page 10). However, Diaz fails to overcome the deficiencies in the application of APA, Dreschler and Nyhagen to independent claim 20, and therefore a prima facie case of obviousness has not been established with regard to the subject matter recited in claim 20 and in dependent claims 21 and 22, and the rejection is not sustained.

Claim 23 stands rejected on the same grounds as claim 20, from which it depends. This claim adds pores to the rubber layer recited in claim 23, and the examiner's position is the same as was expressed in the rejection of claim 15. For the same reasons as were expressed above with regard to claims 15 and 20, we will not sustain this rejection of claim 23.

## CONCLUSION

None of the rejections is sustained.

The decision of the examiner is reversed.

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| NEAL E. ABRAMS<br>Administrative Patent Judge | ) | |
| | ) | BOARD OF PATENT |
| LAWRENCE J. STAAB<br>Administrative Patent Judge | ) | APPEALS<br>AND |

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| | ) INTERFERENCES |
| | ) |
| | ) |
| | ) |
| JENNIFER D. BAHR | ) |
| Administrative Patent Judge | ) |

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